



1970

# The Role of Trainer Personality and the Social Intelligence Factor in Effective Sensitivity Group Leadership

Mary Elizabeth Suran  
*Loyola University Chicago*

## Recommended Citation

Suran, Mary Elizabeth, "The Role of Trainer Personality and the Social Intelligence Factor in Effective Sensitivity Group Leadership" (1970). *Dissertations*. Paper 1061.  
[http://ecommons.luc.edu/luc\\_diss/1061](http://ecommons.luc.edu/luc_diss/1061)

This Dissertation is brought to you for free and open access by the Theses and Dissertations at Loyola eCommons. It has been accepted for inclusion in Dissertations by an authorized administrator of Loyola eCommons. For more information, please contact [ecommons@luc.edu](mailto:ecommons@luc.edu).



This work is licensed under a [Creative Commons Attribution-Noncommercial-No Derivative Works 3.0 License](https://creativecommons.org/licenses/by-nc-nd/3.0/).  
Copyright © Mary Elizabeth Suran

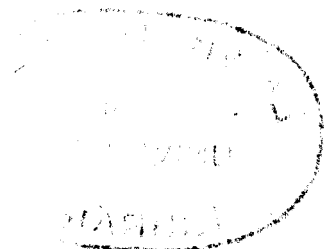
THE ROLE OF TRAINER PERSONALITY  
AND THE  
SOCIAL INTELLIGENCE FACTOR  
IN  
EFFECTIVE SENSITIVITY GROUP LEADERSHIP

by

Mary Elizabeth Suran

A Dissertation Submitted to the Faculty of the Graduate School  
of Loyola University  
in Partial Fulfillment of the Requirements  
For the Degree of  
Doctor of Philosophy

June  
1970



## Life

Mary Elizabeth Suran was born May 30, 1942, in Bonne Terre, Missouri. She graduated from St. Joseph High School, Farmington, Missouri, in May 1960, and received the Bachelor of Arts degree summa cum laude in Sociology from Fontbonne College, St. Louis, Missouri, in May 1964.

After being employed for one year as a personnel management specialist for the United States Civil Service Commission, the author entered the graduate program in Clinical Psychology at Loyola University in September 1965. She served as a graduate assistant to Dr. Ronald E. Walker for the next two years. In February 1967, she began a one semester clerkship at the Loyola University Guidance Center.

The author entered the Doctor of Philosophy program in experimental Psychology with emphasis on the area of personality at Loyola University in September 1967; she is a June 1970 candidate for that degree. She was a recipient of a National Defense Education Act Title IV grant during the two years of academic study leading to the doctoral degree.

In September 1969, she became an assistant professor of Psychology at Saint Xavier College, Chicago, Illinois and is cur-

rently working in that capacity.

## Acknowledgements

The author is primarily indebted and especially grateful to Dr. Ronald E. Walker for his interest in, support and encouragement of not only this research, but also her career as a graduate student. Sincere appreciation is also extended to Dr. Jeanne M. Foley and Dr. William Hunt for their direction in the preparation of this manuscript.

Gratitude is also extended to the Education and Guidance Committee of the Chicago Archdiocesan Health Program for Religious, funded by the Jessie V. and W. Clement Stone Foundation through the Stone-Brandel Foundation, which made possible the training program on which this research was based. The author wishes to express her gratitude to administrators of this program--to Dr. Kathleen Sheridan, Dr. Edward Sheridan, Dr. John Shack, and Father Gerard Egan, members of the training staff--for their generous cooperation. Special thanks is extended to Miss Margaret Rowe, Mr. John Lavigne, Miss Jeanne Hubbuch, and Miss Victoria Vanellin for their professional assistance in the statistical analysis of the data for this study. Gratitude is expressed to the priests and nuns, the trainees in this study, without whom this research would not have been possible.

Finally, the author wishes to thank especially Bernard

Suran for his confidence in and encouragement of the author, as well as for the professional assistance rendered in the data analysis and interpretation.

## Table of Contents

	Page
List of Tables	vii
Introduction	1
Review of the Related Literature	5
Method	20
Subjects	20
Measures	21
Procedure	23
Results	25
Does social intelligence relate positively to trainer effectiveness?	25
Does social intelligence predict the potential success of a trainee in a leader-training program?	44
Does the training program for effective leadership affect social intelligence?	49
What trainer behaviors in actual T-group sessions are related to social intelligence?	54
How useful are the Guilford social intelligence measures in light of the results accumulated from the preceding questions?	61
Discussion	67
Summary	77
Bibliography	
Appendices I Initial Rating of Group Sessions (IRPT) Form	
II Trainer Rating Scale (TRS)	
III Rating of Group Sessions (RGS) Form	
IV Ranking of Group Members on Leadership	
V Ranking of Group Members on Social Intelligence	

## List of Tables

Table	Page
1. Means and Standard Deviations for All Groups on Guilford Social Intelligence Tests	27
2. Significance of Differences between Unconditionally Passed Trainees and Other Trainees on Guilford Social Intelligence Scores	28
3. Significance of Differences between Unconditionally Passed Trainees and College Student Controls on Guilford Social Intelligence Scores	30
4. Significance of Differences between Other Trainees and College Student Controls on Guilford Social Intelligence Scores	34
5. Significance of Differences between All Trainees and College Student Controls on Guilford Social Intelligence Scores	35
6. Significance of Differences between Trainee Groups and Pastoral Institute Participants on Guilford Missing Cartoons Initial Testing	37
7. Biserial Correlations between UCP vs. OT Status of Trainees and Guilford Social Intelligence Scores	38
8. Spearman Rho Correlations between Guilford Social Intelligence Scores and Leadership Ranks for Group I	41
9. Spearman Rho Correlations between Guilford Social Intelligence Scores and Leadership Ranks for Group II	42
10. Pearson Correlations between Guilford Social Intelligence Scores and IRPT Scores	45
11. Biserial Correlations between UCP vs. OT Status of Trainees on the Guilford Tests and IRPT Form	49
12. Means and Standard Deviations of Change Scores for All Groups on Guilford Social Intelligence Tests	51
13. Significance of Change Score Differences between Trainees and Control Groups	52



# List of Tables (Continued)

Table	Page
14. Pearson $r_s$ between Trainees' Guilford Scores and Mean Member-Assigned TRS Scores of 1st Mini-Laboratory Session	55
15. Pearson $r_s$ between Trainees' Guilford Scores and Mean Member-Assigned TRS Scores of 7th Mini-Laboratory Session	56
16. Pearson $r_s$ between Trainees' Guilford Scores and RGS Discrepancy Scores on RGS Items 1, 3, 4, 5	59
17. Pearson $r_s$ between Trainees' Guilford Social Intelligence Scores and RGS Scores for GRS Items 2 and 6	60
18. Pearson $r_s$ between Guilford Social Intelligence Test Scores Pretest with Posttest	62
19. Spearman Rho Correlations between Guilford Social Intelligence Scores and Social Intelligence Ranks for Group I	64
20. Spearman Rho Correlations between Guilford Social Intelligence Scores and Social Intelligence Ranks for Group II	65

## Chapter I

### Introduction

In 1966, Porter wrote in the Annual Review of Psychology: "The most pervasive and controversial approach to management development at the moment is T-group or sensitivity training in all of its many and varied forms....There are serious questions concerning a number of aspects of the technique that deserve far more research before many of the claims made for its advantages can be substantiated....The focus should not be just on the question of whether T-groups are effective in improving job performance, but also on the conditions of their effectiveness" (p. 408; emphasis added).

Campbell and Dunnette (1968) in their classic comprehensive survey of T-group research stressed both the lack, in general, of good, well-controlled studies as well as the neglect of research to focus on certain crucial components of sensitivity group experiences. They stated, "It is imperative that the relative contributions of various technological elements in the T-group method be more fully understood....For example, there are no systematic studies examining the influence of differences in trainer personality and/or style on the outcomes achieved by participants. Case reports and anecdotal evidence are all that exist" (p. 97).

In an earlier review, Stock (1964) included a survey of re-

search bearing on the role of the trainer in the T-group. One of the areas she considered is immediately relevant to the present research and that is, "How does the trainer's personality influence his trainer style?" She reported, however, that "relatively little work has been done in this area" (p. 410). There is an early, essentially clinical study, conducted by Deutsch, Pepitone, and Zander (1948), in which the personality of a single T-group trainer was studied in depth in terms of his training philosophy, goals, and behavior in the group. The study demonstrated for one trainer the complex ways in which personality characteristics may find expression in training behavior. Here, the somewhat patent hypothesis that the trainer is a differential component in the group experience has clinical observational support.

With T-group training having been introduced more than fifteen years ago, and its apparent increasing application, there is more than ever a need for empirical research in this area, and particularly a need to focus on the neglected topic of the trainer.

Initially, some definition of the concept "sensitivity group," or "T-group," the "Human Relations Lab," are in order. These are all terms that refer to groups whose emphasis is on the development of positive human potential in basically normal persons. Although the T-group has been mentioned in reference to research performed in business or managerial programs, T-groups are being employed in ever broadening areas--at the high school level and on college campuses, with church groups, and among different ele-

ments of the public community to facilitate communication and effective, efficient functioning. Bradford, Gibb, and Benne (1964) described the T-group of the National Training Laboratory in Bethel, Maine, one of the main centers of sensitivity training, as one in which "participants have the task of constructing a group which will meet the requirements of all of its members for growth. Members have the opportunity to learn about themselves, about interpersonal relations, about groups, and about larger social systems" (p. viii).

Who is the leader of the sensitivity group? He is usually called a trainer and serves as a resource person for the group rather than an authoritarian figure imposing preconceived goals and types of interaction on the group. It is noticeable that in practice there appears to be a wide variety of leadership styles; trainers differ in group behaviors such as frequency of intervention, degree of self-involvement and self-revelation, and depth of confrontation. But theoretically the trainer's "role is to facilitate the examination and understanding of the experiences of the group. He helps participants to focus on the way the group is working, the style of the individual's participation, or the issues that are facing the group" (Seashore, 1968; p. 1).

As a participant observer, the trainer tries to reveal to the group its own dynamics as it moves through the various stages of group life. Egan (1969) pointed out that the trainer is training group members to participate in his role of participant observer; the participants, in one way or another, learn from him

how to observe what is happening in the group. Egan specified further that the leader "should have a high degree of social sense or social intelligence. This 'feeling' for people is even more important than his knowledge of group dynamics" (p. III-3). And this certainly is logical. If members are to learn from the trainer's modeling to observe what is happening with the group, to be able to observe its dynamics, the trainer himself must be adept at this behavior perception.

It is commonly accepted that a good therapist as well as a good trainer is sensitive to the ideas and feelings of others, even the unvoiced ones. This social intelligence capacity--to understand what those he works with are feeling and thinking--is essential to the effective functioning of the leader or therapist. And here is the primary focus of this research. Theoretically it seems that the factors that contribute to social intelligence should enter into the effective functioning of a sensitivity group leader. The relationships between social intelligence and sensitivity group leadership are the emphasis in this study.

## Chapter II

### Review of the Related Literature

There is presently no published research that has investigated the T-group trainer's effectiveness through the concept of social intelligence. Until recently there was no satisfactory measure of social intelligence, and on the other hand, T-group research focused principally on the personality of the trainer in relation to effective group leadership has been sparse.

The search for an appropriate measure of social intelligence indicated that as early as 1920, E. L. Thorndike proposed that there is a social intelligence different from the ordinary idea of intelligence; he spoke of it as an ability "to act wisely in human relations" (p. 228). However, the general evaluative consensus concerning the initial instruments developed to measure the ability was negative. Various factor analyses indicated that none of the early tests contained any unique variance that could be identified as a social intellectual ability (R. L. Thorndike, 1936; Woodrow, 1939).

Actually, there have been very few instruments designed to attempt to contain the concept Thorndike spoke of in 1920. In 1937, Thorndike and Stein published an evaluation of the attempts to measure social intelligence to that time. These authors reported that the George Washington Test of Social Intelligence

(Moss, Hunt, Omwake, & Ronning, 1927) was the one test widely used in measuring social intelligence and that it had not proved to measure the ability satisfactorily. They concluded that this proved only to be a "rather poor test of general intelligence" (p. 284). The Washington subtests are highly verbal and Thorndike (1940) stated, "This being the case, it is not surprising to find that the test as a whole shows substantial correlation with tests of abstract intelligence" (p. 92).

Thorndike's (1936) factor analysis on this instrument is of a set of intercorrelations of the five subtests of the Social Intelligence Test, and of the Mental Alertness Test, a measure of abstract (verbal) intelligence. Thorndike indicated that "the comprehension and use of words" accounts for most of whatever either test measures. The covariance of this general factor was nine times that of a second factor which had small, predominantly positive loadings with the subtests of the Mental Alertness Test and equally small negative loadings with those of the Social Intelligence Test.

Noting this, Cleeton and Taylor reached similar conclusions in Mental Measurement Yearbook reviews (Buros, 1949): neither external criterion studies nor internal validity studies on this test substantiate that it measures what it claims.

Further attempts at external validation of the Washington test include McClatchey's (1929) work. The behavioral criterion employed in her research was adaptability of girls in their

sorority. Scores on the test did not differentiate between a group of college girls selected as making the best social adaptation in their sorority and an unselected group of college students. Strong (1930) found that the Social Intelligence Test scores were unrelated to participation in club activities in a group of graduate students at a teacher's college.

Studies that reported external criteria correlating significantly with the Social Intelligence Test did not control for the confound of abstract intelligence, which seems a logical explanatory alternate. For example, Hunt (1928) showed positive correlations with occupational level (executives, teachers, and salesmen scored much higher than clerks and unskilled laborers), and with amount of involvement of students in extracurricular activities. Concerning this research, Thorndike (1940) wrote: "Whether these discriminations would hold up in groups equated in abstract verbal ability seems questionable..." (p. 92).

The few other published tests of social intelligence or insight that have appeared since the Washington test to the present decade appear to be equally ineffective. These include the Empathy Test (Kerr & Speroff, 1947), the Test of Insight (Sargent, 1953), and the Social Insight Test (Chapin, 1942). Thorndike's (1959) major objection to Kerr and Speroff's Empathy Test was that its target behavior is prediction of the generalized other, whereas the usual usage of empathy means an ability to react in a differential way to the specific other. Kerr and Speroff call



for the individual to rank (1) the popularity of 15 types of music for a defined type of worker, (2) the circulation of 15 magazines, and (3) the prevalence of 10 types of annoyances. The scoring key was based on empirical facts.

As Thorndike pointed out, there appears to be no inherent validity in the operations required in this test; so its validity must be established empirically through its ability to predict socially important criteria, but the few studies by persons independent of the test constructors have yielded predominantly negative results.

Anastasi's (1961) evaluation of Sargent's (1953) Test of Insight into Human Nature indicated that the validity of this instrument had not been demonstrated. Each item in this test describes a conflict incident in the area of family, opposite sex, social relations, vocation, religious and moral beliefs, and health. The subject is to respond to the two questions applied to each incident: (1) What did the person do and why? (2) How did he feel? Anastasi's evaluation was "...the empirical data on which it was based are very inadequate" (p. 582).

Although the Chapin Social Insight Test was introduced in 1942, very little attention has been accorded it. Recently Gough (1965) presented an extended series of investigations into the validity of this instrument. The test's purpose, as formulated by Chapin, is to measure the ability to recognize, in any situation, (1) the psychological dynamics underlying a particular

behavior, and (2) the stimulus, compromise or innovation necessary to resolve the situation. The respondent is asked to read a vignette describing a particular behavior sample, and then select the option which offers the most insightful commentary or wisest course of action. Criteria of social participation and supervisor's evaluation of subordinates' average degree of social insight were used to establish norms. Although no factor analyses have been reported on this test, it appears that it falls prey to the same criticism as the Social Intelligence Test; that is, there appears to be a logical confound with verbal-abstract intelligence which must be controlled for in some way before these criteria can be accepted as indicative of an ability, social intelligence, distinct from verbal or abstract intelligence.

Gough (1965) found age and educational level positively correlated to scores on Chapin's test. He also reported data which indicated that this test distinguished between students who continued to obtain a Ph. D. and those who dropped out of a graduate program. The Social Insight Test, then, appears to be an interesting test for some purposes but not a sufficiently pure measure of the hypothesized ability, social intelligence.

Thus it is evident that some interest has been generated in a social intelligence factor since E. L. Thorndike's formulation, but that published tests attempting to measure it through the late 1950's proved futile. Cronback (1960) commented on the general status of the measurement of social intelligence: "No evidence

of validity is yet available which warrants confidence in any present technique for measuring a person's ability to judge others as individuals....After 50 years of intermittent investigation,... social intelligence remains undefined and unmeasured" (pp.319-320).

Still, from a pragmatic standpoint, the identification and measurement of a distinct social intellectual ability, different for individuals, would be invaluable in numerous everyday life contexts; and common experience seems to indicate that this is at least a feasible concept to attempt to operationalize successfully. Its potential usefulness in the analysis of the effective sensitivity leader has been indicated above.

A more promising approach to the measurement of individual differences in social intelligence was suggested, but not followed up, by Wedeck (1947). O'Sullivan, Guilford and deMille (1965) who subsequently developed what appears to be a promising test of social intelligence, pointed out that the intent of Wedeck's research was very similar to their own. Wedeck constructed eight psychological ability tests using auditory and pictorial stimuli. A factor analysis of these social intelligence tests, along with seven tests of verbal and spatial abilities, resulted in three non-orthogonal clusters which Wedeck labeled g for general intelligence, v for verbal ability, and psi for psychological ability. The Guilford group of researchers re-analyzed Wedeck's data and found, again, factors distinct from general intelligence. They stated that "Wedeck's success in demonstrating social intelligence factors with tests using visual stimuli should be noted. This is

the kind of stimuli most often relied upon in constructing tests for [the Guilford tests of social intelligence]" (p. 4).

In 1959, J. P. Guilford proposed his theoretical model of intellectual abilities wherein intelligence includes abilities specific to behavioral content; that is, abilities which function when the content to be acted on consists of "information, essentially nonverbal, involved in human interactions, where awareness of attention, perceptions, thoughts, desires, feelings, moods, emotions, intentions, and actions of other persons...is important" (Guilford, 1967, p. 77). This is Guilford's "social intelligence" domain. And he has hypothesized thirty distinct abilities within this behavioral area. All have in common the particular content area--behavior; they differ along the two dimensions: (1) operations--major kinds of intellectual activities or processes, things the organism does with the behavioral content; five intellectual operations are hypothesized: cognition, memory, divergent production (generation of variety of output), convergent production (generation of the one correct solution), and evaluation (judging in terms of criteria); (2) products--the organization that information takes in the organism's processing of it, the results of intellectual processing; these include units (elements having "thing" character), classes (aggregates, the members of which have common properties), relations (connections between units), systems (organized or structured information), transformations (changes or redefinitions in known information), and implications (extrapolations in the form of predictions or antecedents).

By 1965, Guilford and his associates had demonstrated through factor analysis the six predicted cognitive factors hypothesized within the behavioral content area (O'Sullivan & Guilford).

The battery is composed of the following subtests: Expression Grouping--Each item in this test consists of a group of three drawings which depict facial expressions, hand gestures, or body postures and the task is to select one of four alternative drawings of expressions to show that the class of the original three has been cognized. A factor loading of .59 for Guilford's factor, cognition of behavioral classes (CBC) is reported in the test manual (O'Sullivan & Guilford, 1966). CBC is the ability to see similarity of behavioral information in different expressional modes (Guilford, 1967).

Missing Pictures--Photographs of college students combine to form a sequence depicting a story for this test. Only three of the four-picture set are shown and these are in sequence; the task is to choose among three alternates the one which fills the vacant space to make the most reasonable story. A factor loading of .58 for cognition of behavioral systems (CBS) is reported in the test manual (O'Sullivan & Guilford, 1966). CBS is the ability to comprehend a social situation or sequence of social events. And the authors state: "In everyday life, sizing up situations involving two or more persons interacting in them is a very common social requirement for adequate understanding and potential reaction" (p. 2).

Missing Cartoons--Cartoons are used instead of photographs;

this test is otherwise in the same format as Missing Pictures. The task requires the selection of one of four cartoon panels that best fills a blank in an otherwise complete sequence. Missing Cartoons is also a fairly strong measure of CBS, with a loading of .52, but it is not a univocal measure, having a loading of .41 on cognition of behavioral units (CBU) and a loading of .35 on cognition of behavioral implications (CBI). CBU is the ability to understand units of expression, such as facial expression; CBI is the ability to draw implications or make predictions about what will happen following a given social situation (Guilford, 1967).

Picture Exchange--The task in this test is to choose the one of three photographs which, when exchanged for one marked picture of a four-picture sequence will change the story's meaning. This is a univocal measure of cognition of behavioral transformations (CBT). This is defined by Guilford (1967) as the ability to re-interpret either a gesture, a facial expression, a statement, or a whole situation so that its behavioral significance is changed.

Social Translations--This is the one subtest which uses printed words only. The task is to choose the one of three alternative pairs of people between whom a given verbal statement will have a unique meaning, different from that if spoken between members of another given pair. This test has a factor loading of .51 on CBT with a small secondary loading for cognition of behavioral relations (CBR), which is described as the ability to understand social relationships (Guilford, 1967).

Cartoon Predictions--The task in this test is to choose the

one of three alternative cartoons which shows what is most likely to follow a given interpersonal situation cartoon series. This test was shown to have a factor loading of .55 (O'Sullivan & Guilford, 1966) for cognition of behavioral implications (CBI).

The success of the factor analysis in separating the social intelligence factors from one another and from factors of verbal intelligence seems due largely to the limited use of words in the behavioral cognition tests, according to the authors (O'Sullivan & Guilford, 1966).

The test manual presents convincing reliability and construct validity estimates based on factor loadings. Factor loadings for all the tests are above .50 on the principal factor. The authors state: "These...tests are offered for experimental purposes on the basis of their demonstrated construct validities, as expressed in factor loadings on their respective factors" (p. 6). It appears that these behavioral tests are measuring distinct abilities other than those usually measured by verbal intelligence tests and tests of other intellectual qualities, and the logical naming of this group of factors "social intelligence" from an analysis of their content seems accurate.

Shanley (1970) further demonstrated with sixth, ninth, and twelfth grade students the independence of Guilford test performance from abstract intelligence as measured by the Otis tests.

In addition to internal reliability measures in the test manual, are split-half reliabilities which Hoepfner and O'Sullivan

(1968) reported with a group of 229 juniors in high school. The mean Kuder-Richardson reliability estimate they reported for the the six tests was .69.

The present research on the personality of the sensitivity group trainer has focused on the concept of social intelligence as operationalized and measured by Guilford's tests. No data have been published which make use of behavioral criteria to validate the Guilford tests. Concurrent and predictive validity measures have been employed herein as well as test-retest reliability indicators.

As Stock's survey of research on sensitivity groups (1964) indicated, only one study of the T-group trainer (Deutsch et. al., 1948) had appeared in the literature to the time of her review, and this was a clinical study of a single person.

Some studies, though not focused principally on the trainer, included data relevant to the trainer. These reports provided impetus to the decision to study the effect of trainer personality on group effectiveness through the social intelligence variable. Most relevant were the works of Stock and Luft (1960) and Lieberman (1958). These studies suggested that a trainer adapts his style to each particular group.

Lieberman studied two differently composed T-groups. Based on sentence completion test responses, members were classified according to primary emotional expression tendency: fight (major interaction pattern involves expression of aggression and hostility).



ty), flight (major pattern indicates desire to withdraw), pairing (major pattern centers about maintenance of friendly relationships), dependency (presentation of self as weak and in need of help from others), and counterdependency (presentation of self as strong and actively resistant of help).

Two T-groups were formed on the basis of these classifications: one group included an equal number of persons with each of the five primary emotional tendencies; the other group included no pairing members. Observers tabulated for each group during its three week existence the frequency of occurrence of each of the five primary emotional patterns. The pairing pattern behavior differed for the two groups, the latter group being lower in this behavior initially, but gradually increasing until, like the first group, 20 per cent of all affectful comments involved pairing. Most interesting for the present research, however, was the report that pairing behavior of the trainers for the two groups also differed. The first group's trainer expressed the same amount of pairing throughout the group's life; the second group's trainer expressed five times more pairing the third week than the first. The inference drawn by the author was that this trainer was attempting to fill a need for warmth, that he introduced more pairing behavior himself than might have been a natural part of his style otherwise.

Stock and Luft (1960) reported a similar phenomenon occurring in two specially composed groups--one high structure (in which persons preferred specific goals and procedures), and one low

structure (members preferred the exploration of feelings and interpersonal issues). The trainers, who were blind concerning the basis for group composition, reported self-behavior that appeared geared to the differential composition. High-structure group trainers reported they felt they had a fast-moving, sociable group who nonetheless tended to remain at a shallow level of discussion. The trainers found themselves pushing more than usual for process analysis. The low-structure group trainers reported highly verbal, process-oriented members, so much so that they were reluctant to interrupt self-analysis to have the kind of experiences which could then be analyzed. Here the trainers found themselves pushing to introduce content and structure. Although quantitative measures are lacking to make explicit the relationships, it is worthwhile noting about this study and that of Lieberman (1958) that there are indications that perhaps the trainer is sensitive to missing functions in the group. When this occurs he may either deliberately try or unconsciously tend to supply the missing element. The intriguing aspect is the trainer's alertness to, awareness of (conscious or subconscious or unconscious) these interpersonal, social nuances, which would have to precede the alteration in his leadership behavior. It is this interpersonal alertness, this social intelligence, aspect that is being focused on in the present research to attempt to delineate what influence individual differences in this ability, as measured by Guilford's tests, have on leadership style, and in what way other aspects of personality relate to this ability and to style and ef-

fectiveness.

This author has surveyed the research published since the appearance of the Stock (1964) survey and has found a dearth of material that is immediately relevant to the present investigation. One particular exception is a study by Delaney (1966) which indicated that change in social alertness or social intelligence can be expected through training directed at the skills commonly associated with it. Delaney showed that students enrolled in a practicum in counseling increased their sensitization to nonverbal communications. Sensitization was determined before and after training by reaction on a semantic differential scale to filmed emotional portrayals by actors. Training consisted of either informal group exploration of nonverbal communications of the group members themselves or of didactic classroom lecture presentation aimed at the topic, nonverbal behavioral cues. A change in both groups' perceptions of nonverbal stimuli occurred in the direction of greater sensitization.

The Delaney study has special relevance to this investigation since the subjects of the present study were persons, trainee-trainees, who had been studied prior to, during, and upon the completion of an intensive practicum in sensitivity group leadership.

This research has asked as its most essential question: Does the particular hypothesized crucial aspect of a trainer's personality--social intelligence--relate positively to his effec-

tiveness as a trainer? And then, on the hypothesis that it does, is a social intelligence measure a good indicator of the potential success of a trainee in a T-group leader-training program? The expectation was that it should be. Next, what personality factors of the potential leader should training affect--is the social intelligence construct relevant here? Finally, as an actual trainer, how does his social intelligence relate to his actual behaviors in T-group sessions? In addition, Guilford's test itself has been scrutinized in light of its diagnostic and descriptive performance in the study. If social intelligence is related to relevant behavior as expected, then confidence in and the behavioral limits of this test would have certainly been expanded. External criterion reliability and validity measures with this test have been determined and reported in this study.

## CHAPTER III

### Method

Subjects Twenty persons were trained to be sensitivity group leaders as part of a larger project conducted by personnel affiliated with the psychology department of Loyola University, Chicago, instituted by the Education and Guidance Committee of the Chicago Archdiocesan Health Program for Religious, and funded by the Jessie V. and W. Clement Stone Foundation through the Stone-Brandel Foundation. The trainees were all Roman Catholic priests or nuns, age range 27 to 47. All trainees prior to selection were interviewed for 20 minutes by a panel consisting of various combinations of 2 to 4 of the 4 training staff (hereafter referred to as the leaders)--3 male and 1 female Ph. D. clinical psychologists, each with a minimum of three years' experience in leading small groups. The leaders also had biographical data available to them on the applicants. Each staff member cast a vote based on their professional judgment of the candidate's suitability. More positive than negative votes were required to qualify an individual for inclusion in a training group.

On the basis that the training program would be more effective with smaller groups the trainees were divided into 2 groups of 10 persons each; the 4 members of the training staff divided into 2 pairs of co-leaders, each pair principally responsible for

the training of one of the 2 groups. Groups were matched on particularly relevant variables as sex (each group having 8 men and 2 women members) and degree of previous experience of members in sensitivity groups.

Two control groups were employed--one group of 30 introductory psychology college students, 17 females and 13 males; one group of Pastoral Institute students at Loyola University, people spanning the age range of the trainees and of comparable background, that is principally priests and nuns with similar educational training.

Measures Four of the Guilford Social Cognition tests--Social Translations, Cartoon Predictions, Missing Cartoons, and Expression Grouping--were administered immediately before the beginning of the training program and at the final training session to the two trainee groups. The Guilford test manual states that these 4 subtests comprise the best overall composite for the measurement of the social cognition aptitude. Time limitations prevented the use of all 6 Guilford tests. The college student control group was tested twice on the same 4 Guilford tests; three weeks separated the first and second testing sessions for this group. The Pastoral Institute group was administered only the Missing Cartoons subtest, and this test only once. Time considerations precluded the use of the other 3 tests with this control group, as well as a posttest session for Missing Cartoons.

On the basis of the pre-training evaluation interview, scores

were available for the first 9 candidates interviewed, on the Initial Rating of Trainer Potential (IRPT) form. These scores consisted of a leader-composite rating on social intelligence, personal adjustment, leadership potential, and global trainer potential.

In addition, all the trainees were evaluated at the end of each of the 7 Mini-Lab sessions (T-groups led by the trainees as part of the training program) by each of the participants in his lab, on the Trainer Rating Scale (TRS), a 17-item, Likert-type rating form for member reaction to the trainee-trainer's behavior in the immediate session.

The Rating of Group Sessions (RGS) form was completed by Mini-Lab members and their trainee-trainers following the last of the Mini-Lab sessions. This 6-item, Likert model, rating form requires an individual to render judgments about a group session along 6 dimensions.

The TRS, the IRPT, and the RGS forms were developed by the training staff and the Loyola University research staff involved in the larger research project of which this training program was a part. (See Appendix for sample test forms.)

The trainees were given a final general evaluation of their status at the end of the 20 sessions by each of the 4 leaders on (1) their effectiveness as sensitivity group leaders and (2) the degree of social intelligence the leader judged they exhibited. Each leader separately rank-ordered each group on each of the 2 dimensions. In addition, each trainee ranked each other trainee

in his group and himself at the end of the 20 sessions on leadership and on social intelligence.

A final overall evaluation measure was the Unconditional Pass versus Qualified Pass and Fail verdict that the leaders assigned to each trainee upon completion of the 20-session course. A Qualified Pass trainee was required to continue operating under close supervision until that time when the leaders judged his trainer effectiveness sufficiently developed to warrant his operating independently. A Failed trainee was asked to drop out of the trainer program. For various analyses, the Unconditionally Passed trainees (UCPs) were considered as one group, and all other trainees (OTs)--Conditionally Passed and Failed trainees--were considered as one comparison group. Both sets (UCPs plus OTs) composed the experimental group, All Trainees (ATs), which was employed in certain of the data analyses.

In addition to these performance evaluation measures, the Terman (1965) Concept Mastery Test (CMT) as a verbal intelligence indicator was administered to all the trainees prior to training.

The testing program was carried out independently of the training staff who at no time were acquainted with the Ss' performance on any of the instruments.

Procedure The type of T-group activity that the Ss were trained for was a somewhat modified version of the one delineated by Egan (1970). The 2 trainee groups were trained simultaneously and the



program followed was identical for both. The trainees met 2 times a week, for 10 weeks. On some occasions the 2 groups were combined, or divided into smaller clusters, sometimes with members from the other group, for various training exercises. Each group had its 2 constant leaders but also interacted with the other 2 leaders because of the occasional recombinations of members. The first 9 sessions of this training period were used to acquaint the trainees with selected small-group techniques and to allow them to experience these methods themselves; the exercises which were introduced had as their goal the enhancement of positive personal growth, increase in communication skills, and development of more efficient problem solving methods.

After 9 sessions of training in technique and theory the 20 trainees, in pairs, conducted seven, 2-hour sessions of sensitivity laboratories (Mini-Labs). Each pair of trainee-trainers conducted a group composed of 10 to 12 participants, volunteers from varied backgrounds--students, married couples, nuns, priests, and working people.

Each trainer pair was closely observed and evaluated in these sessions by one of the 4 training staff leaders; the trainees which each leader observed varied from session to session.

Four additional sessions followed this "baptism of fire" to evaluate the T-group experience in terms of the further development of the trainees as trainers.

## CHAPTER IV

### Results

The data obtained from this study were analyzed in terms of the five research questions posed earlier.

Does social intelligence relate positively to trainer effectiveness? This question was operationalized in several ways.

Criterion: Unconditional Pass versus Qualified Pass and Fail status upon program completion. For these analyses, the concept "most effective trainer" was operationalized as the UCP trainee, and social intelligence was equated with Guilford test measures. The significance of the mean differences between groups--Unconditionally Passed Trainees (UCPs), Other Trainees (OTs), and College Student Controls (CSCs)--on each of the Guilford social intelligence tests, pre and post, and on the total average Guilford pre-test and posttest scores, was determined. In addition Guilford means derived from all the trainees (ATs) as one group were compared with CSC, and with Pastoral Institute (PI) mean scores. The hypothesis that UCP means would exceed the means of all comparison groups, and that any trainee group means would exceed CSC and PI means was tested against the null hypothesis with the t test.

Of the 20 trainees, 12 were unconditionally passed; 7 were conditionally passed; 1 trainee was failed. Guilford social in-

telligence scores were not complete for 1 member of the UCPs and for 1 member of the OTs due to their absence at one of the testing sessions; therefore for analyses in which these categories were employed in conjunction with Guilford social intelligence scores, UCP  $N=11$ , OT  $N=7$ , and AT  $N=18$ .

Table 1 presents the means and standard deviations for all groups on each of the Guilford social intelligence tests and on the total average Guilford scores. Table 2 gives the  $t$  ratios of the differences between UCPs and OTs on the 10 obtained Guilford measures. Six of the 10 comparisons were significant; Social Translations (ST) posttest and the total average prescore at the .10 level, Cartoon Predictions (CP) pretest and posttest at the .05 level, Missing Cartoons (MC) posttest at the .025 level, and total average postscore at the .01 level. In addition, the binomial test applied to the observed split--in 8 of the 8 comparisons between the 2 groups on each of the specific Guilford tests, the mean performance of the UCPs was superior to that of the OTs--indicated that the probability of obtaining such a split in favor of the UCPs by chance was .004. Those trainees who, having participated in this training practicum which included their being observed in the actual running of a T-group, were judged by the training staff to be fully qualified as trainers were significantly differentiated from the trainees who were not so judged, on 6 of the 10 Guilford measures. Special attention to the CP test was noted in light of its consistent significant differentiation. It

Table 1

Means and Standard Deviations  
for All Groups on  
Guilford Social Intelligence Tests

<u>Guilford Test</u>		<u>UCP</u> <sup>a</sup>	<u>OT</u> <sup>b</sup>	<u>AT</u> <sup>c</sup>	<u>CSC</u> <sup>d</sup>	<u>PI</u> <sup>e</sup>
Social Translations						
Pretest	<u>M</u>	18.52	18.19	18.39	18.73	
	<u>SD</u>	2.61	2.34	2.51	2.50	
Posttest	<u>M</u>	19.45	18.57	19.11	19.42	
	<u>SD</u>	1.67	2.50	2.08	1.91	
Cartoon Predictions						
Pretest	<u>M</u>	22.36	18.81	20.98	22.96	
	<u>SD</u>	3.67	4.93	4.55	2.98	
Posttest	<u>M</u>	24.44	22.00	23.37	23.46	
	<u>SD</u>	2.45	1.60	2.42	2.94	
Missing Cartoons						
Pretest	<u>M</u>	20.45	18.64	19.75	20.89	19.39
	<u>SD</u>	4.70	3.42	4.34	4.92	4.87
Posttest	<u>M</u>	24.18	20.57	22.78	22.42	
	<u>SD</u>	2.17	5.31	4.12	3.98	
Expression Grouping						
Pretest	<u>M</u>	21.48	20.61	21.14	20.82	
	<u>SD</u>	3.05	2.43	2.86	3.40	
Posttest	<u>M</u>	22.32	21.14	21.86	20.58	
	<u>SD</u>	2.24	2.10	2.26	3.13	
Total Guilford Score						
Pretest	<u>M</u>	20.70	19.06	20.06	20.85	
	<u>SD</u>	2.49	1.83	2.39	2.58	
Posttest	<u>M</u>	22.68	20.57	21.86	21.44	
	<u>SD</u>	1.65	2.05	2.09	2.46	

<sup>a</sup>Unconditionally Passed Trainees (N = 11). <sup>b</sup>All Other Trainees (N = 7). <sup>c</sup>All Trainees, i.e. UCP's + OT's (N = 18). <sup>d</sup>College Student Controls (N = 33). <sup>e</sup>Pastoral Institute Controls (N = 100); this group was administered only the MC pretest.

Table 2

Significance of Differences between  
Unconditionally Passed Trainees and Other Trainees on  
Guilford Social Intelligence Scores

<u>Guilford Test</u>	<u>t</u>	<u>p*</u>
Social Translations		
Pretest	.45	NS
Posttest	1.42	.10
Cartoon Predictions		
Pretest	2.06	.05
Posttest	2.00	.05
Missing Cartoons		
Pretest	.74	NS
Posttest	2.35	.025
Expression Grouping		
Pretest	1.06	NS
Posttest	1.13	NS
Total Guilford Score		
Pretest	1.69	.10
Posttest	2.72	.01

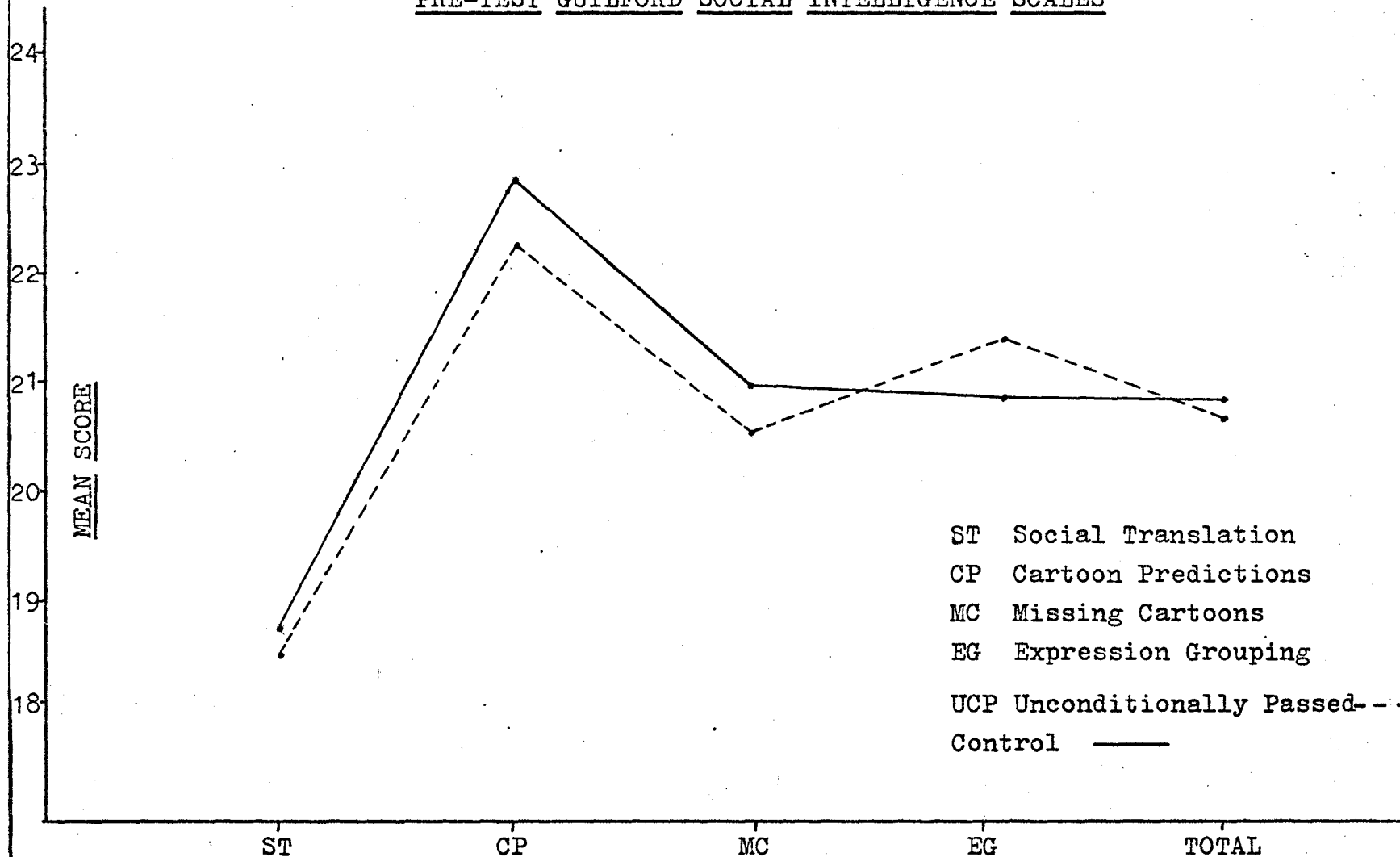
\* df = 16; p for one-tailed test

was also noteworthy that for these comparisons, the total average pre and post scores of these 4 tests was a more powerful indicator than the pre and posttests of any of the tests alone except CP. These findings then supported the contention that effective T-group leadership is positively related to the social intelligence abilities of the leader or trainer.

Table 3 reports the t ratios of the differences between the UCP group and the college student control group (CSCs). It was noted, initially, that 3 of the 10 comparisons were significant, 2 at the .10 level and 1 at the .05 level, but all 3 on posttests, and all 3 in the predicted direction. As in the previous set of comparisons, MC post and total average post yielded significant results. Expression Grouping (EG) post proved an effective differentiator for these 2 groups.

An analysis of the direction of the UCP differences from the CSC mean scores showed that CSC means were greater than UCP means on 4 of the 5 pretest scores, although none of the differences was significant. Importantly, none of the 5 posttest comparisons showed the CSCs outperforming the UCPs and, as stated above, 3 of the 5 showed UCPs significantly better than CSCs. Figures 1 and 2 show graphically this difference in trends for pre- and posttests. The N involved in this relationship (1 of 5 UCP scores higher than CSC on pretest; 5 of 5 UCP scores higher on posttest) was too small to meaningfully apply any test of significance, however. This trend suggested though that the process of the train-

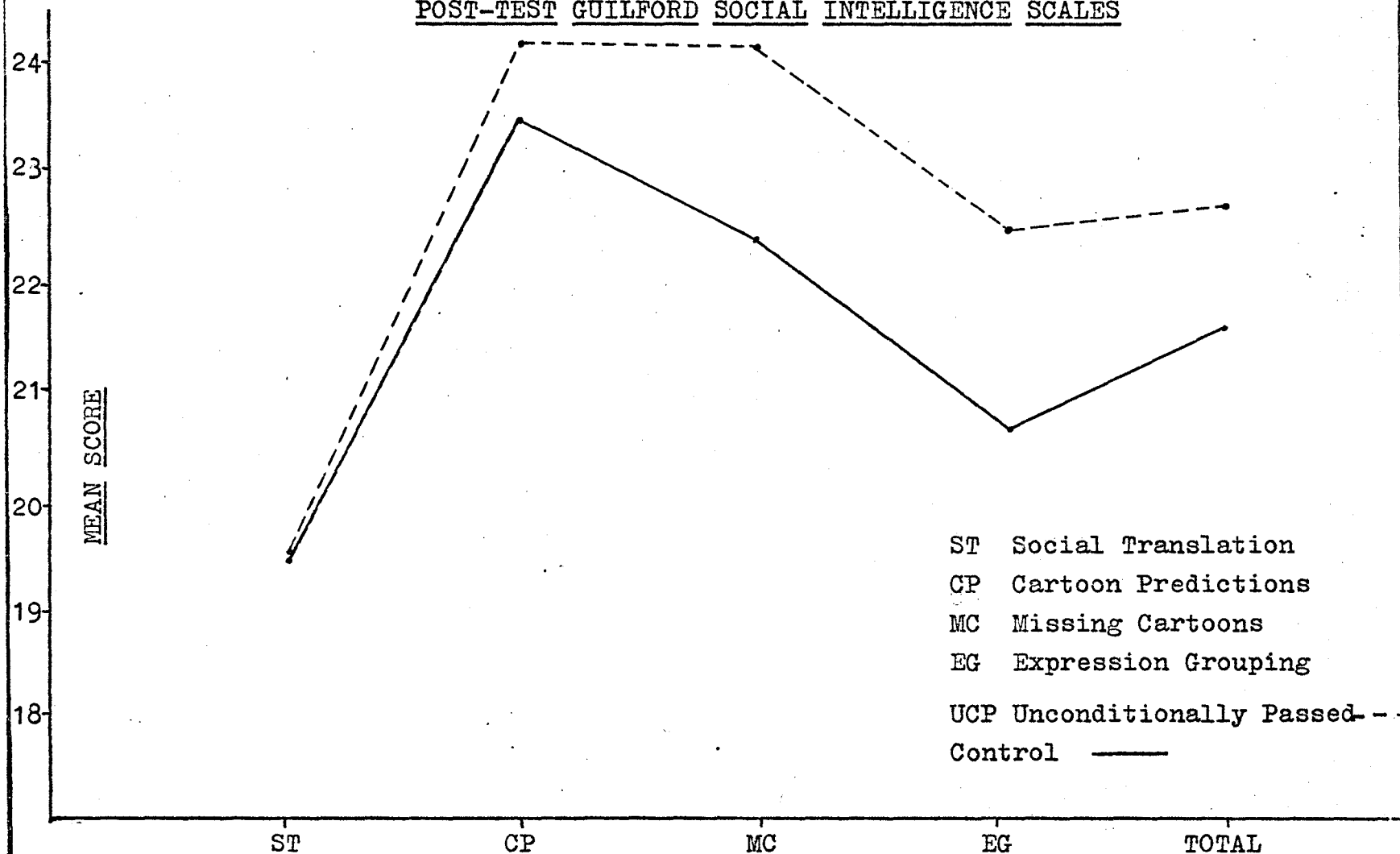
COMPARISON OF UCP TRAINERS VS. CONTROLS ON  
PRE-TEST GUILFORD SOCIAL INTELLIGENCE SCALES



GUILFORD SOCIAL INTELLIGENCE SCALES

Figure 1

COMPARISON OF UCP TRAINERS VS. CONTROLS ON  
POST-TEST GUILFORD SOCIAL INTELLIGENCE SCALES



GUILFORD SOCIAL INTELLIGENCE SCALES

Figure 2



Table 3

Significance of Differences between  
Unconditionally Passed Trainees and College Student  
Controls on Guilford Social Intelligence Scores

<u>Guilford Test</u>	<u>t</u>	<u>p*</u>
Social Translations		
Pretest	-.30	NS
Posttest	.05	NS
Cartoon Predictions		
Pretest	-.52	NS
Posttest	.80	NS
Missing Cartoons		
Pretest	-.20	NS
Posttest	1.37	.10
Expression Grouping		
Pretest	.61	NS
Posttest	1.71	.05
Total Guilford Score		
Pretest	-.15	NS
Posttest	1.53	.10

\* df = 42; p for one-tailed test

ing program effected a positive change in social intelligence for the trainees, significantly beyond that of a control group which was initially equal to or slightly superior in measured social intelligence. Further analysis will be presented under the third research question of this trend. In summary, effective sensitivity group leaders appeared to be more behaviorally alert, socially intelligent, than a random sample of college students; and this superiority in social acuity occurred only after a period of T-group leader training.

Table 4 shows the t ratios of the differences between Guilford means of the OT group (the trainees who were not unconditionally passed at the completion of the training program) and the CSCs. None of the differences were significant in the predicted direction but 2 of the differences, CP pre and total average pre, were significant beyond the .05 level of probability in the opposite direction (CSC mean exceeded OT mean). Thus, those trainees not unconditionally passed, did not excel in social intelligence over a control group of college students, even though they had had a period of special leadership training. Prior to this training, however, they actually were significantly lower on particular measures of social intelligence.

The t ratios of comparisons of all the trainees (ATs), UCPs plus OTs, with the CSCs are given in Table 5. One test, EG post, was significant at the .10 probability level, in the predicted direction. The same 2 pretests significant in the CSC-OT analysis, were again significant in favor of the CSCs over the trainees.

LEWIS TOWERS

Table 4

Significance of Differences between  
Other Trainees and College Student Controls on  
Guilford Social Intelligence Scores

<u>Guilford Test</u>	<u>t</u>	<u>p*</u>
Social Translations		
Pretest	-.51	NS
Posttest	-.99	NS
Cartoon Predictions		
Pretest	-2.86	.01
Posttest	-1.25	NS
Missing Cartoons		
Pretest	-1.13	NS
Posttest	-1.02	NS
Expression Grouping		
Pretest	-.16	NS
Posttest	.45	NS
Total Guilford Score		
Pretest	-1.70	.05
Posttest	-.85	NS

\* df = 38; p for one-tailed test

Table 5  
Significance of Differences between  
All Trainees and College Student Controls  
on Guilford Social Intelligence Scores

<u>Guilford Test</u>	<u>t</u>	<u>p*</u>
Social Translations		
Pretest	-.64	NS
Posttest	-.82	NS
Cartoon Predictions		
Pretest	-1.99	.05
Posttest	-.06	NS
Missing Cartoons		
Pretest	-.66	NS
Posttest	.13	NS
Expression Grouping		
Pretest	.18	NS
Posttest	1.49	.10
Total Guilford Score		
Pretest	-1.93	.05
Posttest	.47	NS

\* df = 49; p for one-tailed test

apparently reflecting the major influence of the OT contribution while the UCPs performance on these pre-measures did nothing to counteract this trend. Similarly, the significance of EG post seemed primarily due to the performance of the UCPs, as was indicated by a comparison of the t ratios with this test on Tables 3 and 4.

In summary of the reported data, only some persons at the completion of this special program were significantly higher on social intelligence than a random college group, and it was precisely this subgroup of trainees who were judged by the professional staff to be effective trainers at the end of the practicum. This trainee subgroup, in addition, was not significantly different from the control group on social intelligence prior to training, whereas the other group of trainees, those who were not judged sufficiently effective as trainers to have been passed unqualifiedly, were significantly lower than the control group on 2 of the 5 pre-measures of social intelligence.

Table 6 gives the t ratios, for the MC pretest only, between the Pastoral Institute (PI) control group and the trainee groups. None of the ts was significant. These groups were not differentiable on the basis of this one Guilford pretest.

Table 7 lists the biserial correlations between Guilford social intelligence scores and the final status (a rating of unconditional pass versus qualified pass or fail rating) of the trainees upon completion of the training program. The pre-training total

Table 6

Significance of Differences between  
Trainee Groups and Pastoral Institute Participants  
on Guilford Missing Cartoons Initial Testing

	<u>df</u>	<u>t</u>	<u>p</u> *
Unconditionally Passed Trainees vs. Pastoral Institute Participants	109	.76	NS
Other Trainees vs. Pastoral Institute Participants	105	-.40	NS
All Trainees vs. Pastoral Institute Participants	116	.45	NS

\* one-tailed test

Table 7  
Biserial Correlations between  
UCP vs. OT Status of Trainees  
and Guilford Social Intelligence Scores

<u>Guilford Test</u>	<u>Pretest</u>	<u>p*</u>	<u>Posttest</u>	<u>p*</u>
Social Translations	.07	NS	.27	NS
Cartoon Predictions	.08	NS	.57	.05
Missing Cartoons	.27	NS	.57	.05
Expression Grouping	.20	NS	.30	NS
Total Guilford Score	.44	.05	.57	.05

\* N = 18; p for one-tailed test

average Guilford score and CP, MC, and total average postscores yielded significant correlations. This analysis further supported the hypothesis that social intelligence is a discriminating personality factor of the effective T-group trainer.

Criterion: Leadership ranks assigned to trainees upon program completion. The next set of analyses represent an attempt to answer the same question as the previous set and basically to answer it against the same criterion: the leadership ability, the ability to function well as a trainer, of the trainee. Whereas before, this was determined by the training staff's assignment of trainees to 1 or the other of the dichotomy, leaders good enough to pass unconditionally versus those not so qualified, the present tests were based on the training staff's delineation of the rank of each trainee, compared with the others in his particular training group, on leadership. Thus these tests were based on a criterion that required a finer discrimination of the trainees along the leadership continuum, and also allowed for the play of the individual criterion-setters. That is, Spearman rank correlation ( $\rho$ ) coefficients were obtained, for each of the 2 training groups separately, between the Guilford scores and leadership rating ranks by each of the training staff, by relevant combinations of the staff (combination ranks based on a groups' own 2 staff leaders, combination ranks based on ratings of the 2 staff leaders of the other group, and the 4 staff leaders' ranks combined), and by peers. (Mean leadership peer rating ranks were



used. Peers were defined as members of one's own training group only.)

Table 8 gives the Spearman rhos between the social intelligence scores and the leadership ranks by the various raters for the trainees trained in Group I. The N varied for Group I because of the absence of 2 group members for part or all of the Guilford testing sessions. Twenty-four of the 80 rhos were significant at the .10 or lower level of probability. Guilford measures that appeared the most powerful included CP post (5 of the 8 methods of ranking leadership yielded significant rhos with this test); MC post (7 of the 8 ranking methods yielded significance with MC post); and the total average Guilford scores, pre and post (pretest average yielded 5 significant rhos, as did the posttest average).

Table 9 shows for Group II the Spearman rhos between the social intelligence scores and the leadership ranks by the various raters. For this group, only 7 of the 80 rhos were significant at the .10 or lower level of probability. Six of these 7 rhos, however, involved the Social Translations (ST) test, pre and post. Thus, for Group II, leadership ranks yielded significant correlation with social intelligence only when the latter ability was measured by one particular test, ST.

The rho correlation of agreement between co-staff leaders on how their group members ranked on leadership ability was .73 for the 2 Group I leaders and .89 for the 2 Group II leaders. With

Table 8  
Spearman Rho Correlations between  
Guilford Social Intelligence Scores and  
Leadership Ranks for Group I

<u>Guilford Test</u>	<u>N</u>	<u>A</u>	<u>Leaders<sup>a</sup></u>				<u>Mean Ranks</u>		
			<u>B</u>	<u>C</u>	<u>D</u>	<u>Peers</u>	<u>A&amp;B</u>	<u>C&amp;D</u>	<u>All Leaders</u>
Social Translations									
Pretest	9	.17	.14	-.01	.23	.54*	.31	.14	.18
Posttest	8	.31	.05	.38	.09	-.27	.25	.20	.20
Cartoon Predictions									
Pretest	8	.10	.35	.34	.11	-.54	.11	.23	.23
Posttest	8	.22	.50*	.59*	.52*	-.63	.44	.60*	.59*
Missing Cartoons									
Pretest	9	.23	.24	.10	-.06	.76*	.33	.04	.06
Posttest	8	.69*	.57*	.53*	.28	.64*	.70*	.48*	.48*
Expression Grouping									
Pretest	8	-.10	.28	.20	.42	-.21	.14	.34	.34
Posttest	8	.24	.36	.12	.22	.36	.37	.21	.26
Total Guilford Score									
Pretest	8	.41	.58*	.53*	.36	.15	.54*	.53*	.53*
Posttest	8	.29	.46*	.51*	.51*	.21	.45	.53*	.55*

a A & B were coleaders of Group I; C & D were coleaders of Group II.

one-tailed test

\* Levels of significance: p .10 .06 .05 .025 .01

<u>N</u>					
9	.44	.52	.56	.63	.71
8	.47	.55	.60	.67	.75

Table 9  
Spearman Rho Correlations between  
Guilford Social Intelligence Scores and  
Leadership Ranks for Group II

<u>Guilford Test</u>	<u>A</u>	<u>Leaders<sup>a</sup></u>				<u>Mean Ranks</u>			
		<u>B</u>	<u>C</u>	<u>D</u>	<u>Peers</u>	<u>A&amp;B</u>	<u>C&amp;D</u>	<u>All Leaders</u>	
Social									
Translations									
Pretest	.07	.46*	.47*	.12	.68*	.31	.44*	.36	
Posttest	-.01	.39	.59*	-.01	.60*	.22	.43	.21	
Cartoon									
Predictions									
Pretest	-.14	.10	.15	-.26	.39	-.01	.05	.00	
Posttest	-.42	.01	-.12	-.35	.22	-.11	.13	-.17	
Missing									
Cartoons									
Pretest	-.22	.24	-.01	-.06	.30	-.01	.12	.10	
Posttest	-.43	.10	.31	-.11	.24	-.16	.28	-.04	
Expression									
Grouping									
Pretest	.10	.02	.26	-.48	.37	-.05	-.14	-.10	
Posttest	-.12	.05	.16	-.08	.27	-.08	.14	.06	
Total Guilford									
Score									
Pretest	-.21	.15	.22	-.26	.44*	-.01	.10	.00	
Posttest	-.30	.23	.19	-.05	.33	-.01	.26	.07	

<sup>a</sup> A & B were coleaders of Group I; C & D were coleaders of Group II.

(N = 10

one-tailed test

\* Levels of significance: p .10 .05 .025

r .44 .56 .66

9 degrees of freedom both values were significant at the .01 or lower level of probability. It was apparent that there was highly significant and substantial agreement between the 2 leaders of each group on the judgment of the leadership abilities of their particular group members. It should be noted, however, that there was a lack of complete independence of these ratings, in the sense that throughout the training program the leaders conferred about the progress of the trainees, about their development as potential T-group trainers.

Finally, the social intelligence of the trainees ranked by the same method as leadership was ranked, correlated .77 with the leadership rankings. This was a Pearson product-moment correlation. That is, when trainees and training staff were asked to rate the trainees on the degree of social intelligence they judged the trainees to possess, and again on their leadership ability, much of whatever was judged to enter into the level of each of these 2 characteristics in a trainee was judged to be common to both. A caution in the interpretation of this correlation is necessary. The measurement device (ranking) was the same for both factors--social intelligence and leadership. Thus, whatever was common to this method of ranking was indicated by the correlation coefficient, as well as was the common variance which persons judged to belong to social intelligence and leadership.

Does social intelligence predict the potential success of a trainee in a leader-training program? This possibility was investigated in a 2-step operational sequence. A Pearson  $r$  was applied to the Guilford scores of the trainees and the pre-training evaluation on the IRPT given by the training staff of the trainees' potential for success in the training program. Would the 2 predictive methods (Guilford prescores and IRPT) correlate positively with each other? The 9 trainees evaluated on the IRPT composed the sample for these correlations. The IRPT items had been designed to be logically relevant to successful completion of the training program.

The next logical step taken to actually pinpoint the question--Is there a predictive utility to social intelligence measured by the Guilford scores--was to correlate the Guilford pre-training scores with the final UCP versus OT criterion of trainee success, and to employ the same operation with the IRPT evaluation scores and the UCP versus OT criterion, to attempt to differentiate the effectiveness of these 2 pretraining evaluation methods. A biserial correlation coefficient was applied to the data.

Table 10 presents the results pertinent to the first step--the Pearson correlations of the IRPT with the Guilford scores, both pre- and posttests. Fourteen of the 40 correlations were significant beyond the .10 level of probability. The pattern that the significant correlations took is again noteworthy. The test,

Table 10  
Pearson Correlations between  
Guilford Social Intelligence Scores  
and IRPT Scores

<u>Guilford Test</u>	<u>Social Intelligence</u>	<u>Personal Adjustment</u>	<u>Leadership Potential</u>	<u>Global Training Potential</u>
Social Translations				
Pretest	.42	.06	.41	.49*
Posttest	.48*	.01	.63*	.42
Cartoon Predictions				
Pretest	.64*	.30	.54*	.52*
Posttest	.41	.29	.04	.27
Missing Cartoons				
Pretest	.17	.11	-.03	.27
Posttest	.24	.16	.38	.47*
Expression Grouping				
Pretest	.05	-.35	-.05	.09
Posttest	.81*	.67*	.59*	.66*
Total Guilford Score				
Pretest	.42	.05	.26	.45
Posttest	.68*	.33	.54*	.60*

df = 7

one-tailed test

\* Levels of significance: p .10 .05 .025 .005

r .47 .58 .66 .80

EG post, gave significant rs with all 4 of the IRPT judgment items, all of these rs probable at less than the .05 level. Three of the 4 IRPT correlations with CP pre and total average post measures were significant. Between the pre and post measures of ST there were three significant correlations with the IRPT. The significant rs were fairly well distributed among the different IRPT items, with "Personal Adjustment" being somewhat the exception; only 1 of the 10 Guilford measures was significantly correlated with the trainees' rating on this item. And the final IRPT item, which asks for an overall rating of the global training potential of the trainee, correlated significantly with 5 of the 10 Guilford measures. Thus, there apparently was a relationship between test-measured social intelligence and training staff pre-training evaluations of the potential success of aspiring trainees.

When Table 10 significant correlations are viewed from the aspect of pretest versus posttest, it is seen that measured social intelligence on the Guilford posttests was more clearly related to these pre-training judgments than were Guilford pretests; 10 of the 14 significant results were between various posttests and the IRPT judgments. And so the analysis presented on Table 11 was performed to check the differential success of the Guilford pretests against the IRPT pre-training judgments in predicting final outcome of training. Biserial correlation coefficients between the Guilford pre-scores and the final UCP versus OT di-

Table 11

Biserial Correlations between  
UCP vs. OT Status of Trainees  
and Evaluation of Trainees on  
the Guilford Tests and IRPT Form

<u>Guilford Test</u>	<u>Pretest</u>	<u>p*</u>	<u>Posttest</u>	<u>p*</u>
Social Translations	.16	NS	.20	NS
Cartoon Predictions	-.20	NS	.11	NS
Missing Cartoons	.57	.10	.75	.025
Expression Grouping	-.23	NS	.09	NS
Total Guilford Score	.17	NS	.50	.10

IRPT Test

Social Intelligence	.36	NS
Personal Adjustment	.70	.025
Leadership Potential	.33	NS
Global Training Potential	.57	.10

\* N = 8; p for one-tailed test



chotomy are presented here along with biserial correlations between IRPT scores and the UCP-OT dichotomy. Guilford posttest score biserial correlations with the UCP-OT criteria are also reported. The fact that Guilford scores obtained upon completion of the practicum came into stronger agreement with the IRPT judgments, as Table 10 results indicated, makes the Table 11 results not surprising.

Only 1 of the 5 Guilford pretest correlations (MC) approached significance, while 2 of the 4 IRPT items, Personal Adjustment and Global Training Potential, were significantly related to final outcome; 2 of the 5 Guilford post measures yielded significance. Here again was an indication of the development of social intelligence in this particular training program. This analysis did not support the predictive utility hypothesis for the Guilford tests in a trainer-training program. (The caution for interpretation of these results is that the IRPT measures and the final UCP-OT criterion judgments were made by the same people, the training staff.)

Two sets of results that did give support to the possibility of the usefulness of the Guilford social intelligence measures as predictors of success were reported earlier: (1) The OTs scored significantly lower than the UCPs and the CSCs on 2 of the 5 Guilford pre-measures; the UCPs and CSCs were not significantly different from each other on these pretests. (2) Table 7 reported biserial correlations between Guilford tests and the UCP-

OT criterion but for the entire trainee N of 18. With this larger sample, the total average Guilford pretest score was significantly related to the final status of the trainees ( $r_b = .44$ ,  $p = .05$ ).

Does the training program for effective leadership affect social intelligence? The results thus far reported have begun to answer this next research hypothesis--that social intellectual abilities are positively affected, and affected differentially, in favor of the more successful trainee-trainer, by a training program aimed at the development of effective sensitivity leaders. To this point, the hypothesis that leadership and social intelligence are positively related has been supported by much of the data in the study. If this is so, does training to be an effective leader affect social intelligence? It was expected that social intelligence would increase as a result of leadership training and would increase more for the more effective leaders.

The results presented previously, in Table 11, indicated the development of social intelligence with training by the presence of stronger relationships between Guilford post measures and post-training outcomes, than occurred with Guilford pre-training measures. Table 10 indicated that there was little correlation between Guilford pretests and IRPT judgments, but much stronger indications of a relationship between social intelligence and the IRPT pre-measures upon completion of the practicum.

Also, the reverse trend, reported previously, between UCP and CSC superiority on social intelligence measures after intervention of the training program supported the hypothesis that social intelligence would be positively affected by the training program. To further implement this research question, the following operations were performed. The trainees' mean change scores from the first Guilford testing to the second testing upon completion of the program were computed as well as the change scores from test to retest of the college student control group. The t test was used to test the mean differences between groups and subgroups on these change scores. Also, the binomial test was used to determine the probability of obtaining certain observed splits between UCPs and comparison groups, and between all trainees (ATs) and CSCs for number of times the mean change scores were superior in favor of the predicted group.

Table 12 presents the means and standard deviations for the change scores from pretest to posttest, for all groups, for the 5 ways in which social intelligence was measured by the Guilford tests. And Table 13 gives the t ratios of the change score differences between trainee and CSC groups. Both UCP and OT trainee groups changed positively on the Guilford tests after training and although UCPs showed a greater change on 4 of the 5 measures, none of these differences was large enough to be significant. Significant change score differences were obtained on MC and average Guilford score for UCPs over CSCs and for ATs over CSCs. The sig-

Table 12

Means and Standard Deviations  
of Change Scores<sup>a</sup> for All Groups  
on Guilford Social Intelligence Tests

<u>Guilford Test</u>		<u>UCP</u> <sup>b</sup>	<u>OT</u> <sup>c</sup>	<u>AT</u> <sup>d</sup>	<u>CSC</u> <sup>e</sup>
Social	<u>M</u>	1.00	0.38	0.76	0.69
Translations	<u>SD</u>	3.14	1.58	2.66	2.15
Cartoon	<u>M</u>	1.15	1.76	1.39	0.68
Predictions	<u>SD</u>	3.56	2.32	3.15	2.33
Missing	<u>M</u>	3.73	1.92	3.03	1.79
Cartoons	<u>SD</u>	3.30	3.75	3.59	2.44
Expression	<u>M</u>	0.84	0.54	0.72	-0.25
Grouping	<u>SD</u>	4.29	3.15	3.89	2.57
Total Guilford	<u>M</u>	1.88	1.49	1.73	0.53
Score	<u>SD</u>	2.46	1.87	2.26	1.36

<sup>a</sup> Change score = mean algebraic difference between pretest and posttest scores for the same persons

<sup>b</sup> Unconditionally Passed Trainees (N = 11)

<sup>c</sup> All Other Trainees (N = 7)

<sup>d</sup> All Trainees (N = 18)

<sup>e</sup> College Student Controls (N = 33)

Table 13

Significance of Change Score<sup>a</sup> Differences  
between Trainee and Control Groups

Unconditionally Passed Trainees  
vs. Other Trainees

<u>Guilford Test</u>	<u>df</u>	<u>t</u>	<u>p*</u>
Social Translations	16	0.458	NS
Cartoon Predictions	16	-0.379	NS
Missing Cartoons	16	1.013	NS
Expression Grouping	16	0.156	NS
Total Guilford Score	16	0.337	NS

Conditionally Passed Trainees  
vs. College Student Controls

Social Translations	42	0.357	NS
Cartoon Predictions	42	0.490	NS
Missing Cartoons	42	2.031	.025
Expression Grouping	42	0.988	NS
Total Guilford Score	42	1.917	.05

Other Trainees  
vs. College Student Controls

Social Translations	38	-0.352	NS
Cartoon Predictions	38	1.086	NS
Missing Cartoons	38	0.112	NS
Expression Grouping	38	0.681	NS
Total Guilford Score	38	1.534	.10

All Trainees  
vs. College Student Controls

Social Translations	49	0.100	NS
Cartoon Predictions	49	0.897	NS
Missing Cartoons	49	1.417	.10
Expression Grouping	49	1.046	NS
Total Guilford Score	49	2.316	.025

<sup>a</sup> Change score = mean algebraic difference between pretest and posttest scores for the same persons.

\* one-tailed test

nificance of these 2 measures in the AT-CSC comparisons appeared to involve more than the sole contribution of the UCPs. This was especially true for the total average Guilford score, because OTs change scores also significantly exceeded CSCs change scores for this measure.

The binomial test yielded a value of .06 for the probability of obtaining the observed splits between trainee groups and CSC comparison group for number of times the trainee groups (OT and UCP) change score means exceeded the college control group change score means. That is, on 4 of the 4 Guilford tests, the UCP mean changes were greater than the college control group mean changes; on 3 of the 4 Guilford tests the OT mean changes were greater than the college control's. The binomial test probability was .06 that 7 of these 8 comparisons would favor the trainee groups by chance.

In 7 of the 8 Guilford test comparisons, the UCP change score means exceeded all other comparison groups' change score means (UCP compared with OT and UCP compared with CSC on each of the 4 Guilford tests). A one-tailed binomial test yielded a probability value of .06 for this occurrence. There was definite support for the hypothesis here in that (1) social intelligence increased as a result of this specialized training in T-group leadership for all the trainees. That is, training focused on the development of effective leadership seemed to be focused on abilities concerned with social intelligence. All the trainees were

recipients of this training and all increased on social intelligence, compared to the increase of a control group. (2) In addition, some of the trainees increased more from the beginning of the training program to the time of its completion in their level of social acuity. The trainees who did were the trainees who also were judged as meeting unconditionally the criterion of effective leadership.

What trainer behaviors in actual T-group sessions are related to social intelligence?

Criterion: Trainer Rating Scale. To implement this research question, the Trainer Rating Scale (TRS), completed by Mini-Lab members after each of the 7 lab sessions, was studied. Pearson rs were obtained for each of the 17 TRS items (which ask for the member's reaction to specific group behaviors of the trainer) with each of the Guilford scores. Each TRS score was the mean of the scores assigned the trainee-trainers by all the members of the particular group for that session. Tables 14 and 15 give the Pearson rs between the Guilford scores and the TRS items for the first Mini-Lab session and for the seventh Mini-Lab session, respectively. None of these trainer-behavior descriptive items, as rated by the Mini-Lab members, seemed consistently related to the social intelligence level of the trainee-trainers. The number of significant correlations obtained (6 of 170 for the first session, and 1 of 170 for the last session) could have been ex-

Table 14

Pearson r's between Trainees' Guilford Scores and  
Mean Member-Assigned TRS Scores of 1st Mini-Laboratory Session

TRS Item	Social Translations		Cartoon Predictions		Missing Cartoons		Expression Grouping		Total Average Score	
	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post
1	.26	.40	.05	.01	.15	.27	-.16	.34	.19	.31
2	-.13	.06	.26	.23	-.03	.04	-.23	.38	-.01	.31
3	-.39	.16	.07	-.01	-.12	.16	.18	.17	-.01	.12
4	-.63	-.07	-.25	-.10	.18	.00	-.41	-.23	-.24	-.04
5	-.09	.12	.08	.00	.05	.35	.01	-.06	.17	.19
6	-.03	-.13	-.07	.05	.33	.45*	-.32	.10	.06	.19
7	-.11	.08	.35	-.01	.05	.34	.01	.05	.12	.16
8	.29	-.16	-.05	-.04	.22	.32	.24	-.01	.30	-.04
9	-.12	.05	.02	-.08	-.02	.17	.12	-.03	.06	.04
10	-.08	-.53*	-.03	.32	.13	.14	.07	-.07	.05	-.08
11	-.06	.16	.12	.10	.09	.33	.08	.16	.12	-.38
12	.21	.06	.13	.08	.29	.17	.02	.04	.09	.14
13	.22	.15	.16	.06	.20	.08	-.01	.10	.08	.14
14	-.26	-.17	-.04	-.20	-.04	.11	-.05	-.22	.01	-.19
15	-.09	-.14	.18	.13	.16	.41*	-.04	.25	.26	.15
16	-.02	-.02	-.01	-.02	.13	.42*	.06	.04	.13	.13
17	-.16	.07	-.26	-.22	.09	.32	-.14	-.15	-.07	.02

df = 16; two-tailed test

\* Levels of significance: p .10 .05  
r .40 .47



Table 15

Pearson rs between Trainees' Guilford Scores and  
Mean Member-Assigned TRS Scores of 7th Mini-Laboratory Session

TRS Item	Social Translations		Cartoon Predictions		Missing Cartoons		Expression Grouping		Total Average Score	
	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post
1	-.31	-.33	.21	-.11	-.08	-.17	.39	-.04	.09	-.24
2	-.26	-.35	.11	.02	.13	-.11	.09	.18	.04	-.06
3	-.35	-.33	-.01	-.16	.00	.03	.09	-.10	-.07	-.16
4	-.25	-.32	-.13	.10	.04	-.31	-.08	-.08	-.13	-.07
5	-.22	-.03	-.19	-.08	-.03	.17	.32	-.26	.06	.02
6	-.21	-.33	.11	.03	-.05	.10	.09	-.09	.07	.08
7	-.20	-.19	.03	-.12	-.04	-.04	.23	-.13	.01	-.14
8	.04	-.14	.22	.28	.19	.14	.15	.08	-.23	.17
9	-.32	-.14	-.03	-.26	-.30	-.06	.02	.13	.23	-.17
10	-.34	-.35	-.06	.26	.21	-.22	.07	-.03	.17	.07
11	-.21	-.04	.27	.08	.02	.06	.22	.03	.15	.07
12	.23	.05	.09	.11	.34	.03	.01	.15	.26	.07
13	.15	.15	.10	.08	.25	-.08	.09	.09	.22	.04
14	-.17	-.32	.14	.11	.01	.20	.00	.06	.03	.04
15	-.02	-.22	.21	.10	.11	.22	.19	.18	.21	.09
16	-.09	-.25	.00	-.05	.02	.18	.12	.01	.02	.01
17	-.07	-.43*	-.31	-.34	.04	-.13	-.17	-.26	-.20	-.35

df=13; two-tailed test

\*p .10

pected by chance with this number of total correlations. With this caution, the following noteworthy tendencies were observed for session 1. Missing Cartoons posttest accounted for 3 of the 6 significant correlations; TRS item 4 "intellectual rather than feeling" accounted for 2 of the 6 significant TRS correlations, and these correlations were in a logical direction--the more socially intelligent trainer was the less intellectualized trainer; if there was any tendency for this TRS form to render significant correlations with Guilford measured social intelligence, this decreased from the first to the seventh Lab session (6 correlations significant in Table 14; 1 significant in Table 15).

Criterion: Rating of Group Sessions Measure. An analysis of the Rating of Group Session (RGS) responses by Mini-Lab members and by the trainee-trainers was also seen as relevant to this particular research question. Items 1, 3, 4, and 5 of this test ask for an assessment of the seventh session in terms of worthwhileness, degree of feeling-sharing, degree of conflict, and degree of self-disclosure, respectively. The trainee-trainer and the members of the Mini-Lab of which he was a co-trainer, both responded to the RGS items in reference to the group session just completed. Items 1, 3, 4, and 5 were analyzed in terms of discrepancy scores, the absolute, or real, amount by which the trainer's rating deviated from the average response of his group members to the particular item. Pearson product-moment correlations between the trainer's discrepancy scores for these 4 items

and their Guilford scores were obtained.

Analysis of the RGS with the Guilford involved a trainee N of 15; there were the 2 trainees for whom complete Guilford scores were not available. In addition, 3 other trainees did not take the RGS test.

The Pearson rs are given in Table 16. A casual glance immediately reveals significant trends yielded by this test. Five of the 6 significant correlations were between Guilford tests and the discrepancy score of RGS item 3. This item concerns amount of feeling sharing the rater thought was present in the just-ended session. Even though a two-tailed test was planned and executed, the direction of this correlation was somewhat surprising. Those trainers most socially intelligent showed the greatest amount of discrepancy between their evaluation and their members' mean evaluation of how much feeling sharing occurred during the session. That is, whether over- or underestimated, the trainee-trainer's evaluation of the group session on this RGS item was more divergent from the Lab-group's evaluation as his Guilford social intelligence score increased.

RGS items 2 and 6 asked the individual to rate himself on amount of activity shown during the session and degree of anxiety he felt. Table 17 shows the Pearson rs between the direct self-rating of the trainee-trainer on RGS items 2 and 6 and his Guilford scores. Only correlations with item 6, which asked for an indication of amount of anxiety the trainer felt, showed any sig-

Table 16

Pearson  $r$ 's between Trainees' Guilford Scores  
and RGS Discrepancy Scores<sup>a</sup>  
on RGS Items 1, 3, 4, 5

Guilford Test	RGS Items			
	1	2	3	4
Social Translations				
Pretest	-.03	.21	-.21	.02
Posttest	.29	.28	.25	.48*
Cartoon Predictions				
Pretest	.25	.20	.02	-.04
Posttest	.24	.53*	.21	-.12
Missing Cartoons				
Pretest	.12	.58*	-.18	.00
Posttest	.37	.61*	.12	-.09
Expression Grouping				
Pretest	-.30	.58*	.02	-.16
Posttest	.14	-.32	-.10	.05
Total Average Score				
Pretest	.09	.45*	-.01	-.10
Posttest	.32	.37	.21	.00

<sup>a</sup> RGS discrepancy score = the absolute discrepancy between the trainee's reaction and the mean of his Mini-Lab members' reaction to an RGS item.

df = 13; two-tailed test

* Levels of significance:	<u>p</u>	.10	.05	.025
	<u>r</u>	.44	.51	.59

Table 17

Pearson r between Trainees' Guilford Social Intelligence Scores  
and

RGS Scores for RGS Items 2 and 6

	RGS Item	
Guilford Test	2	6
Social Translations		
Pretest	.13	-.19
Posttest	.07	.15
Cartoon Predictions		
Pretest	.11	-.40
Posttest	-.11	.32
Missing Cartoons		
Pretest	.00	.11
Posttest	.01	-.44*
Expression Grouping		
Pretest	.17	-.61
Posttest	.14	.27
Total Average Score		
Pretest	.15	-.03
Posttest	.04	-.40

df=13; two-tailed test

*Levels of significance:	p	.10	.05	.02	.01
		.44	.51	.64	.59

nificance. For MC post and EG pre, significant negative correlations existed between anxiety and social intelligence.

How useful are the Guilford social intelligence measures in light of the results accumulated from the preceding questions? Confidence in the Guilford's construct validity has been increased by a survey of the significant results it has thus far produced in the present study, which supported the prior hypotheses concerning the nature of social intelligence and its relationship to leadership ability.

A direct evaluation of the utility of the Guilford tests in operationalizing the social intelligence construct involved the performance of several other tests.

Social intelligence and abstract intelligence. The Guilford's relationship with verbal intelligence on the Terman Concept Mastery Test was investigated. No significant relationship was found to exist between abstract intelligence and Guilford social intelligence for this group of experimental subjects. The Spearman rhos between Terman Concept Mastery Test intelligence scores and Guilford scores were .30 for the Guilford pretest total with the Terman pretest total and .12 for the Guilford posttest total with the Terman pretest total. No Terman posttest was administered. Neither rho was significant.

Test-retest reliability. Table 18 gives test-retest reliability measures for the Guilford tests, for the trainee group

Table 18  
Pearson rs  
Between Guilford Social Intelligence Test Scores  
Pretest with Posttest

Guilford Test	All Trainees		College Student Controls	
	df	r	df	r
Social Translations	16	.16	31	.55*
Cartoon Predictions	16	.55*	31	.67*
Missing Cartoons	16	.64*	31	.86*
Expression Grouping	16	-.14	31	.69*
Total Average Score	16	.55*	31	.88*

one-tailed test

\*Levels of significance: p .01 .005 .0005

df	16	.54	.59	.71
<u>df</u>	31	.41	.45	.55

(ATs) and the college control group. Pearson rs were obtained. All of the correlations were substantial and significant for the college controls toward whom no program aimed at changing social intelligence had been aimed. Average Guilford score, CP, and MC yielded significant test-retest reliabilities even for the experimental groups, though the reliabilities were lower and significant at lower levels of confidence. This was to be expected in light of the predicted relationship between training and social intelligence. In fact, these different reliability data for the trainee group and the control group further established confidence in the proposal that social intelligence changes with training.

External validity measures. Predictive and concurrent validity indicators were computed with Spearman rhos, between the Guilford pre- and post-measures and social intelligence as measured in the form of rater's ranking the trainees, by training group, on degree of social intelligence. Raters were each of the 4 training staff leaders, combinations of the 2 staff leaders of each group and of the 4 taken together, and the peers (whose mean ranks were used as one score).

Table 19 gives the rhos for Group I; Table 20, for Group II. Seventeen of the 80 rhos in Table 19 were significant at the .10 level of probability or less. The most noteworthy aspect of these significant correlations involved the Guilford test, Missing Cartoons. Eleven of the 17 significant findings were with this particular test. MC seemed to be an especially sensitive measure of



Table 19  
Spearman Rho Correlations between  
Guilford Social Intelligence Scores and  
Social Intelligence Ranks for Group I

<u>Guilford Test</u>	<u>N</u>	<u>Leaders<sup>a</sup></u>				<u>Mean Ranks</u>			<u>All Leaders</u>
		<u>A</u>	<u>B</u>	<u>C</u>	<u>D</u>	<u>Peers</u>	<u>A&amp;B</u>	<u>C&amp;D</u>	
Social Translations									
Pretest	9	.31	.48*	.26	.09	.66*	.48*	.18	.35
Posttest	8	.30	-.09	.29	.10	-.19	.10	.25	.25
Cartoon Predictions									
Pretest	8	-.19	-.36	.11	.19	-.61	-.27	.17	-.05
Posttest	8	.10	.16	.34	.38	-.16	.20	.37	.36
Missing Cartoons									
Pretest	9	.49*	.71*	.28	-.16	.87*	.72*	.08	.42
Posttest	8	.57*	.55*	.55*	.23	.63*	.66*	.46*	.63*
Expression Grouping									
Pretest	8	-.35	.25	.13	.43	-.21	.63*	.31	.10
Posttest	8	.39	.07	.17	-.17	.13	.25	-.10	.13
Total Guilford Score									
Pretest	8	.11	.36	.48*	.37	.16	.35	.52*	.45
Posttest	8	.30	.12	.37	.28	-.10	.24	.30	.38

<sup>a</sup> A & B were coleaders of Group I; C & D were coleaders of Group II.

one-tailed test

\* Levels of significance:  $\underline{p}$  .10 .05 .025 .01

$\frac{N}{9}$	$\underline{r}$	.44	.56	.63	.72
8	$\underline{r}$	.47	.60	.66	.75

Table 20

Spearman Rho Correlations between  
Guilford Social Intelligence Scores and  
Social Intelligence Ranks for Group II

<u>Guilford Test</u>	<u>Leaders<sup>a</sup></u>				<u>Mean Ranks</u>			<u>All Leaders</u>
	<u>A</u>	<u>B</u>	<u>C</u>	<u>D</u>	<u>Peers</u>	<u>A&amp;B</u>	<u>C&amp;D</u>	
Social Translations								
Pretest	.30	.22	.53*	.34	.84*	.44*	.50*	.41
Posttest	.10	.04	.56*	.41	.73*	.36	.56*	.36
Cartoon Predictions								
Pretest	.15	-.15	.38	-.05	.57*	.11	.23	.14
Posttest	-.01	-.11	.15	-.18	.15	-.07	.02	.04
Missing Cartoons								
Pretest	.09	.10	.35	.12	.13	.12	.23	.30
Posttest	-.22	-.08	.51*	.25	.22	-.12	.48*	.23
Expression Grouping								
Pretest	.25	-.43	.28	-.20	.69*	.14	.49*	-.08
Posttest	.23	-.10	.46*	.14	.32	.03	.34	.27
Total Guilford Score	.09	-.11	.41	.07	.62*	.12	.27	.16
Pretest	.10	-.01	.39	.26	.24	.01	.39	.26
Posttest								

<sup>a</sup> A & B were coleaders of Group I; C & D were coleaders of Group II.

one-tailed test; N=9

\*Levels of significance:  $p$  .10 .06 .05 .025 .01  
 $r$  .44 .53 .56 .63 .72

social intelligence with Group I when the criterion employed was ratings assigned by peers and by staff.

Fourteen of the 80 rhos included in Table 20 were significant at the .10 level of probability or lower. Seven of these significant rhos were between the Social Translations test and the criterion ranks. For Group II, against the criterion of ratings of social intelligence by training staff and peers, Social Translations appeared to be the most powerful indicator.

The rho correlation of agreement between co-staff leaders on how their group members ranked on social intelligence was .55 for the 2 Group I leaders and .53 for the 2 Group II leaders. With 9 degrees of freedom, both values were significant between the .05 and .10 level of significance. There was less agreement between co-leaders on the social intelligence ranks of their members than there was on the leadership ranks (whose agreement correlations, reported previously, were .73 and .89 respectively for Groups I and II). These leaders had consulted extensively concerning the abilities of these trainees as trainers so complete independence was not present.

## CHAPTER V

### Discussion

The many moderate correlations and significant differences which the data of this study yielded, in the many different concrete ways in which the research questions had been operationalized, and consistent with the theorizing that led to the study, lead to a general confidence in the usefulness of the social intelligence concept for a more meaningful understanding of the good T-group trainer. This conclusion is strengthened further when one considers the limited range of this social intelligence construct in the particular sample. These trainees had been screened, and were selected as persons for whom it was judged highly probable that they would be successful trainers, given specific training. One of the factors which the training staff attempted to assess through interview as a deciding factor for acceptance was social intelligence. Still the Guilford tests generally distinguished the UCP group from the OTs. Thus social intelligence appears to be not just a logical correlate of effective leadership, but an empirically validated one.

In addition, significant results obtained in this study, in which the Guilford tests were employed as the concretization of social intelligence, have indicated the value of the use of these tests to delve into other research questions for which this con-

construct is deemed relevant. For example, if mental retardates can be shown to vary on this ability through the Guilford tests, are the higher scorers more likely to adjust well to an unprotected social situation like working at a simple task within the larger society?

When O'Sullivan (1965) presented the 6 Guilford behavioral cognition factors of social intelligence she stated that the construct validity shown in the factor analysis study does not guarantee predictive and practical usefulness. Should this be established, she added, "these objectively-scored, reliable, construct-valid tests could serve as criterion measures of social intelligence, as diagnostic techniques in a clinical setting, as job selection instruments, or as training devices to mention but a few possibilities" (p. 520). The present external criterion results warrant further use of this test and further empirical attempts at extension of the boundaries of practically-valid application of these tests.

A frequency count of the Guilford tests in terms of which ones supported most consistently the logical expectations about the workings of the social intelligence construct revealed that the total pre- and posttest average scores based on the four subtests used gave the most reliable and powerful estimates. This probably reflects the complexity of the behavioral situations involved in this study which conceivably brought into play the whole range of social intellectual abilities, so that the measure that

allowed for the influence of more of these factors was the most effective one.

Cartoon Predictions was the most powerful single measure in testing the hypotheses of this research. CP is a principal measure of cognition of behavioral implications (CBI), the ability to make predictions about what will happen following a given social situation. Both CP pre- and posttest measures consistently yielded significance.

All of the subtests showed validity on various criteria. Why did some social intelligence subtests yield convincing results with some criteria and other social intelligence tests provide significant findings on different standards? It is possible that the different criteria actually emphasized different components of what is involved in Guilford's operationalism of social intelligence, and since the subtests are meant to be relatively pure measures of these different sub-factors, different tests could be crucial depending on the criterion situation, on the factors of social intelligence differentially involved in the criteria.

Sometimes one subtest was a powerful measure for 1 of the training groups, but not the other, as with Missing Cartoons for Group I and Social Translations for Group II. Here different staff members could have tended toward the development of different social intelligence factors in their training of the trainees. This would be a hypothesis worth studying further.

Missing Cartoons is a measure principally of cognition of

behavioral systems (CBS). It has rather strong secondary loadings on both cognition of behavioral units, the ability to understand units of expression like facial expressions, and CBI (O'Sullivan & Guilford, 1966). MC is the 1 subtest used which taps substantially, more than 1 of the social intelligence factors. This could explain an over-all-groups-and-situations effectiveness for MC (the more factorally complex test best representing the more complex social intelligence criterion behaviors) but it does not account for, instead, the differential effectiveness of MC with Group I when leadership ranks and social intelligence ranks were a criterion. And Social Translations yielded significance specific to Group II on this same criterion--leadership and social intelligence ranks. ST is principally a measure of cognition of behavioral transformations, the ability to re-interpret situations so that their behavioral significance is changed.

These were the only analyses for which these 2 matched groups were treated separately. Future study might profitably focus on the behaviors of training staff in relationship to differential ability development of trainee groups.

The 6 Guilford tests represent only that aspect of social intelligence which Guilford labeled cognition, understanding, of behavioral situations. Hypothetically, there are other social intelligence operations, Guilford says, which are yet to be measured--evaluation, memory, divergent and convergent processes involved in behavioral content. These seem logically related to sensitive trainer functioning. It is probable that tests represen-

ting these factors would capture even more of the variance which discriminates the successful trainer-aspirant.

A definite conclusion concerning the training program itself should be noted. The training program appears to have brought about change in the target behavior--effective leadership, defined in terms of social intelligence. Those persons who were judged as the most effective leaders had changed significantly more on social intelligence during the period of the training program than a group of college students who had received no particular training experience. Even the leaders who were judged to need further training had profited from the experience, it appears. Their social intelligence level had increased generally more than had the control group's. Thus the decision to initiate such a program as this seems justified in view of the findings of this study.

Conclusions drawn from results of comparisons of the trainees with the college student controls should be at least tempered by the fact that the time between the pretest and posttest for this latter group was 3 weeks; the time between pretest and posttest for the trainees was 10 weeks. It would be advisable to compare a control group's test-retest change over 3 weeks with another control group's change over a period of 10 weeks, to support the assumption of this study that the increased time between the trainees' testing did not account for their greater changes in Guilford scores compared to the CSCs.



The CSC control group contained a greater proportion of women than did the trainee groups; but Guilford (O'Sullivan, Guilford, and deMille, 1965) reported no sex differences on these tests.

Most of the specific results of this research have been interpreted in terms of the 5 research questions as they were presented in the previous chapter. One exception which deserves added attention is the finding described in Table 16, concerning the RGS scores. This set of results concerns the strong positive relationship between the trainee-trainer's Guilford social intelligence level and how discrepant he was in his judgment of how much feeling-sharing his Mini-Lab group had expressed, from how much feeling sharing his group itself felt had occurred. A 2-tailed test of significance had been planned and was executed; still a logical theory from which to understand this relationship, consistent over 4 of the Guilford tests, is not immediately evident.

One possibility concerns the still-novice status of even the UCP trainees who, although they have the qualifications of good trainers, are limited in their experience as trainers. One can conceptualize a 3-stage progression from non-trainee or therapist to novice trainer to sophisticated, feeling and cognizing, trainer. Paralleling this would be the major processes of these stages--The first stage is a stage of direct experiencing of feelings, but with minimal objectification. This would be the non-

therapeutic stage and would be most characteristic of the T-group member and the non-therapeutic trainer. That is, certainly much emphasis has been on immediate experiencing of feelings in the T-group and it is possible that these people have reached this stage. Now for the next higher stage of progression to final, sophisticated therapeutic effectiveness, the UCP trainer is the example. He shows an ability for being able to cognize, to make sense of the behavioral content of the group, to objectify the ongoing experiences; he can most likely verbalize crucial behavioral relationships within the group sessions. Most likely, as a beginning trainer he has to distance his own feelings in the development of his role as "monitor." That is, a full experience of his own spontaneous feelings operates initially as confounding static for him, at the point where he is bent on the development of an appreciation and conceptualization of the feelings outside him--in the ongoing group session. Often this phenomenon is observed in beginning therapists.

Guilford's view of social intelligence in relation to self-understanding is important here. "In addition, for the purposes of this study [from which the social intelligence test factors were derived] behavioral cognition is not considered to include the understanding of one's own motivations and feelings. Such comprehension may involve other aptitudes or traits, such as the ability to be objective about one's self as readily as about another person" (O'Sullivan, Guilford, and deMille, 1965, p. 5).

It is proposed that as this novice trainer or therapist gains more actual experience in the trainer and/or therapist role, exercising his actual ability for understanding, for making sense of, the behavior of the group members, he gradually moves into the third stage--the stage of the sophisticated, mature, fully efficient trainer or therapist. At this point, not only does he exercise his ability for deriving meaning from the external behavioral morass--from the group members or from the client--but he need no longer inhibit immediate reactions to his own spontaneous feelings; these now are both experienced spontaneously yet monitored, understood and made use of as part of the total behavioral situation.

With this 3-stage theory as background, the positive correlation for the amount of discrepancy between the trainer's view of group feeling-sharing versus the group's view, and the social intelligence level of the trainer can be given a tentative explanation.

When one judges feeling sharing of a group, how much feeling sharing he the judge actually did enters into his judgment, and probably is given a disproportionately greater weight than other factors. Now for the novice, socially intelligent trainer, how much feeling sharing he did or didn't do is not so accessible. Like looking through the wrong end of a pair of binoculars he has had to put the group off from his own experiencing to see them clearly. Thus his evaluation of his own feeling sharing

does not enter so accurately into his formula for judging the presence of this factor in the session.

The not-so-socially-intelligent trainer has experienced his feelings but, by definition, has not been able to conceptualize his or the group's behavior very well. Still, his judgment of his own behavior concerning feeling sharing is more likely to be accurate as it enters into the judgmental equation for degree of feeling sharing in general during the session, since not working at conceptualizing the group's behavior, neither has he had to hold back his own feelings. And so when both are asked to rate the whole session on this particular factor, the less effective trainer would actually appear the more astute judge.

That is, the socially intelligent trainer might be very accurate concerning his observations of members' behavior in the ongoing group. When asked to give a judgment at the end of the session which involves his knowing both his own behavior well and the group's and which is probably heavily influenced by his feelings of his own behavior, he may turn out to be more inaccurate than his less socially intelligent peer who is not involved in the same behavior-objectifying, cognizing process.

Another analysis which attempted to understand the trainer's behavior in the actual running of a group, involved the Trainer Rating Scale. Generally this form did not prove fruitful. Perhaps the items on this test have not captured the relevant behaviors that distinguish a good leader from a poor one. It is pos-

sible that the members were not alert to these actually relevant behaviors presented in the items. From sensitivity group theory, at least a greater alertness to aspects of the trainer's behavior than initially exhibited would have been expected from the first to the seventh session. But the frequency of significant correlations decreased from the first to the seventh session analysis which leads to further lack of confidence in the form itself.

It is noted also that even if the one item which hinted at validity on the TRS is true--the socially intelligent leader does not appear intellectualized to the members--the RGS analysis just presented suggests that for this novice leader, even though his own behavior may be so, he is not so aware of his own behavior but at this point may be much more focused on the group and not so objectively aware of his own immediate feelings.

## CHAPTER VI

### Summary

Some aspects of the hypothesized positive relation between social intelligence, measured by 4 of the Guilford tests of social intelligence--Social Translations, Cartoon Predictions, Missing Cartoons, and Expression Grouping--and effective sensitivity group leadership were investigated with 2 groups of persons who participated simultaneously in the same training program for potential T-group leaders. These persons were studied before and during their training, in the running of actual T-groups, and at the completion of their program.

Results showed that trainees who passed this program unconditionally (UCPs,  $N=11$ ) were significantly higher on social intelligence at the completion of training than both a random college group ( $N=33$ ) and the trainees who did not pass unconditionally (OTs;  $N=7$ ). The UCPs were not significantly different from a control group on social intelligence prior to training; both UCPs and the controls were significantly higher than the other trainees on 2 of the Guilford measures prior to training.

Also, trainees' Guilford scores correlated positively with leadership ranks assigned them by the training staff and by peers. These results were specific to certain of the Guilford tests, how-

ever, and the Guilford tests yielding significant effects differed for the 2 training groups.

The effect of training on the social intelligence variable was striking. The trend for controls to surpass the trainees on Guilford pretests was completely reversed on the posttests. The change scores of UCP and OT trainee groups from before to after training were generally significantly greater than the controls' change. And UCPs change scores tended to be greater than OTs (UCP change was greater, but not significantly so on 3 of the 4 Guilford tests used, and on the total average score)..

Attempts to assess what trainer behaviors in the actual running of T-groups were correlated with social intelligence were generally unsuccessful. The Trainer Rating Scale, a member-assessment-of-trainer-behavior form, was considered in terms of lack of validity and sensitivity, as partial explanation for the failure in this area. In regard to findings on the Rating of Group Session form, relevant to T-group behavior of the socially intelligent trainer, a theory concerned with the novice status of the new trainer was advanced to explain the discrepancy between this person's and his Lab group's analysis of the degree of feeling sharing they judged to have occurred in their group.

Test-retest reliability data were presented for the Guilford tests. It was shown that abstract intelligence was not related to social intelligence as measured by the Guilford tests for this group of persons.

It was concluded that the social intelligence concept is a meaningful one in terms of which to consider the personality of the T-group trainer. It appears related to trainer effectiveness and can be altered positively by programs aimed at the development of effective T-group leadership. Conclusions concerning its predictive powers for successful trainer training are qualified by the test's limitations in discriminating among members of groups for whom the social intelligence range is already limited.



## Bibliography

- Anastasi, A. Psychological testing. New York: Macmillan, 1961.
- Bottrill, J. The social intelligence of students. Journal of Psychology, 1967, 66, 211-213.
- Bradford, L. P., Gibb, J. R., and Benne, K. D. (Eds.) T-group theory and laboratory method. New York: Wiley, 1964.
- Campbell, J. P., and Dunnette, M. D. Effectiveness of T-group experiences in managerial training and development. Psychological Bulletin, 1968, 70, 73-104.
- Chapin, F. S. Preliminary standardization of a social insight scale. American Sociological Review, 1942, 7, 214-225.
- Cleeton, G. U. The Social Intelligence Test: A review. In O. K. Buros, Jr. (Ed.) The third mental measurements year-book: Highland Park, N. J.: Gryphon Press, 1949, p. 96.
- Cronbach, L. J. Essentials of psychological testing. New York: Harper & Row, 1960.
- Delaney, D. J., and Heimann, R. Effectiveness of sensitivity training on the perception of non-verbal communications. Journal of Consulting Psychology, 1966, 13, 436-440.
- Deutsch, M., Pepitone, A., and Zander, A. Leadership in a small group. The Journal of Social Issues, 1948, 4, 31-40.
- Egan, G. The contract group: An experiment in interpersonal growth. Original manuscript, Loyola University, 1969.
- Egan, G. Encounter: Group processes for interpersonal growth. Belmont, Cal.: Brooks-Cole, 1970.

- Gough, H. G. A validation study of the Chapin Social Insight Test. Psychological Reports, 1965, 17, 355-368.
- Guilford, J. P. New frontiers of testing in the discovery and development of human talent. In Seventh Annual Western Regional Conference on Testing Problems. Los Angeles: Educational Testing Service, 1958, pp. 20-32.
- Guilford, J. P. Three faces of intellect. American Psychologist, 1959, 14, 469-479.
- Guilford, J. P. Intelligence: 1965 model. American Psychologist, 1966, 21, 20-26.
- Hoepfner, R. and O'Sullivan, M. Social intelligence and IQ. Educational and Psychological Measurement, 1968, 28, 339-344.
- Hunt, T. The measurement of social intelligence. Journal of Applied Psychology, 1928, 12, 317-334.
- Kerr, W. A. and Speroff, B. J. The Empathy Test. Chicago: Psychometric Affiliates, 1947.
- Lieberman, M. A. The relationship of group climate to individual change. Unpublished doctoral dissertation. University of Chicago, 1958. Summarized by D. Stock in L. Bradford, J. Gibb, and K. Benne (Eds.) T-group theory and laboratory method. New York: Wiley, 1964.
- McClatchey, V. R. A theoretical and statistical critique of the concept of social intelligence and of attempts to measure such a process. Journal of Abnormal and Social Psychology, 1929, 24, 217-220.
- Meeker, M. N. The structure of intellect: Its interpretation and uses. Columbus, O.: C. E. Merrill, 1969.
- Moss, F. A., Hunt, T., Omwake, K. T., and Ronning, M. M. Social Intelligence Test. Washington, D. C.: George Washington University, 1927.

- O'Sullivan, M. Behavioral (social) intelligence: A factor analysis. Dissertation Abstracts, 1965, 26, 519-520.
- O'Sullivan, M., Guilford, J. P., and deMille, R. The measurement of social intelligence. Report from the Psychological Laboratory, Number 34. Los Angeles: University of Southern Cal., 1965.
- O'Sullivan, M. and Guilford, J. P. Six factor tests of social intelligence: Manual of instructions and interpretations. Beverly Hills, Cal.: Sheridan Psychological Services, 1966.
- Porter, L. W. Personnel management. Annual Review of Psychology, 1966, 17, 395-422.
- Sargent, H. D. The Insight Test: A verbal projective test for personality. New York: Grune & Stratton, 1953.
- Shanley, L. A normative study and developmental theory of social intelligence. Unpublished doctoral dissertation, Loyola U., 1970.
- Smith, P. C. and Crammy, C. J. Psychology of men at work. Annual Review of Psychology, 1968, 19, 467-496.
- Stock, D. A survey of research on T-groups. In L. Bradford, J. Gibb, and K. Benne (Eds.) T-group theory and laboratory method. New York: Wiley, 1964.
- Stock, D. and Luft, J. The T-E-T design. Typewritten manuscript, National Training Laboratories, 1960. In L. Bradford, J. Gibb, and K. Benne (Eds.) T-group theory and laboratory method. New York: Wiley, 1964.
- Strong, R. Relation of social intelligence to certain other factors. School & Society, 1930, 32, 268-272.
- Taylor, H. R. The Social Intelligence Test: A review. In O. K. Buros, Jr. (Ed.) The third mental measurements yearbook. Highland Park, N. J.: Gryphon Press, 1949, p. 97.

Thorndike, E. L. Intelligence and its uses. Harper's Magazine, 1920, 140, 227-235.

Thorndike, R. L. Factor analysis of social and abstract intelligence. Journal of Educational Psychology, 1936, 27, 231-233.

Thorndike, R. L. The Social Intelligence Test. Review in O. K. Buros, Jr. (Ed.) The 1940 mental measurements yearbook. Highland Park, N. J.: Gryphon Press, 1940, p. 92.

Thorndike, R. L. The empathy test. Review in O. K. Buros, Jr. (Ed.) Fifth mental measurements yearbook. Highland Park, N. J.: Gryphon Press, 1959, pp. 120-121.

Thorndike, R. L. and Stein, S. An evaluation of the attempts to measure social intelligence. Psychological Bulletin, 1937, 34, 275-285.

Wedeck, J. The relationship between personality and psychological ability. British Journal of Psychology, 1947, 57, 133-151.

Woodrow, H. The common factors in fifty-two mental tests. Psychometrika, 1939, 4, 99-108.

## Appendix I

### Initial Rating of Potential Trainers by Training Staff (IRPT)

Rater \_\_\_\_\_

Potential Trainer \_\_\_\_\_

Date \_\_\_\_\_

#### 1. Social Intelligence

_____	_____	_____	_____	_____
1	2	3	4	5
Low		Average		High

#### 2. Personal Adjustment

_____	_____	_____	_____	_____
1	2	3	4	5
very inadequate		Average		Very adequate

#### 3. Leadership Potential

_____	_____	_____	_____	_____
1	2	3	4	5
Low		Average		High

#### 4. Global Training Potential

_____	_____	_____	_____	_____
1	2	3	4	5
Low		Average		High

## Appendix II

### Trainer Rating Scale (TRS)

Trainer being Rated \_\_\_\_\_ Session number \_\_\_\_\_ Group \_\_\_\_\_  
Rater's Name \_\_\_\_\_ Date \_\_\_\_\_

Please use the following scale in making your ratings:

1	/	2	/	3	/	4	/	5	/	6	/	7
Not at all		To a very limited degree		To a limited degree		To a moderate degree		To a high degree		To a very high degree		To an extremely high degree

PLEASE NOTE: Use the rating 8 if you feel that you do not have sufficient information or data to rate a particular item. However, use 8 only if absolutely necessary. Try, if possible, to rate each item.

Rating (1-7) To what extent did the trainer:

- \_\_\_ 1. provide effective structure to deal with the problems and situations of the group.
- \_\_\_ 2. intervene in the group process.
- \_\_\_ 3. facilitate interaction in the group.
- \_\_\_ 4. keep his comments on an intellectual rather than a feeling level.
- \_\_\_ 5. intervene appropriately and constructively.
- \_\_\_ 6. give support and encouragement to the group.
- \_\_\_ 7. deal effectively with the emotional dimensions of the group interaction.

To what extent was the trainer:

- \_\_\_ 8. permissive.
- \_\_\_ 9. aware of what was happening in the group.
- \_\_\_ 10. passive
- \_\_\_ 11. a catalyst or facilitator.
- \_\_\_ 12. a teacher or one who offered wisdom.
- \_\_\_ 13. a counselor or psychotherapist.
- \_\_\_ 14. a friend.

Appendix II (continued)

\_\_\_15. a good group member.

\_\_\_ Please give an overall rating to the performance of the trainer (from 1 to 7 again, 1 meaning extremely poor, 7, extremely good).

\_\_\_ Please give a rating to the overall performance of the group (from 1 to 7, 1 meaning extremely poor, 7 meaning extremely good).

Appendix III

RATING OF GROUP SESSIONS (RGS)

Name \_\_\_\_\_

Date \_\_\_\_\_

Please indicate your reactions to today's session by marking an X:

1. I felt that this session was:

<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>
not worth- while			average			very worthwhile		

2. In regard to my participation in this session, I was:

<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>
very inactive			average			very active		

3. In this session, there was:

<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>
very little open sharing of feelings			average			much open sharing of feelings		

4. The level of conflict in this session was:

<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>
very low			average			very high		

5. The amount of self-disclosure in this session was

<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>
very little			average			very much		

6. On an anxiety scale from 0 to 100, with 0 meaning no anxiety and 100 meaning an intense amount of anxiety, give yourself a numerical score for how anxious you feel now: \_\_\_\_\_.



## Appendix IV

### Ranking of Group Members on Leadership

Name \_\_\_\_\_

Date \_\_\_\_\_

We would like your general evaluation of the leadership ability of the people in your group. Leadership has been variously defined. Here, we are referring to the ability to be an effective leader of the kind of sensitivity groups you have been conducting in this program. Admittedly, it involves a complex of functions; we would like you to give a global judgment of the group members on their ability to effectively and optimally lead a sensitivity group in the accomplishment of its goals.

RANK each member of your group, including yourself, on sensitivity-group leadership. Assign each person a rank from 1 to 10. 10 represents the high end of the scale. Use each rank only once.

	<u>Rank</u>
Sr. A *	_____
Fr. B	_____
Fr. C	_____
Fr. D	_____
Sr. E	_____
Fr. F	_____
Fr. G	_____
Fr. H	_____
Fr. I	_____
Fr. J	_____

\* Actual names of group members were part of the original form.

## Appendix V

### Ranking of Group Members on Social Intelligence

Name \_\_\_\_\_

Date \_\_\_\_\_

We would like your general evaluation of a complex global concept--the social intelligence level of the people in your group. As you give your impressions, please use the following definitions as your standard. O'Sullivan, Guilford, and deMille (1965) stress

the ability to understand the thoughts, feelings, and intentions of individual others (emphasis here is not with comprehension of the generalized other).

Another aspect, given by Egan (1970) is

a feeling for people that involves knowing how to get in contact with them without manipulating them.

RANK each member of your group, including yourself, on social intelligence. Assign each persona a rank from 1 to 10; 10 represents the high end of the scale. Use each rank

	Rank
Sr. A*	_____
Fr. B	_____
Fr. C	_____
Fr. D	_____
Sr. E	_____
Fr. F	_____
Fr. G	_____
Fr. H	_____
Fr. I	_____
Fr. J	_____

\*Actual names of group members were part of the original form.

APPROVAL SHEET

The dissertation submitted by Mary Elizabeth Suran has been read and approved by the director of the dissertation. Furthermore, the final copies have been examined by the director of the dissertation and the signature which appears below verifies the fact that any necessary changes have been incorporated, and that the dissertation is now given final approval with reference to content and form.

The dissertation is therefore accepted in partial fulfillment of the requirements for the degree of Doctor of Philosophy.

5-29-70

Date

Ronald E Walker

Signature of Adviser